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June 2000

FY99
ANNUAL PROGRAM SUMMARY
-Salem District -
Bureau of Land Management

HD
243
.07
S254
1999

As the Nations' principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering the wisest use of our land and water resources, protecting our fish and wildlife, preserving the environmental and cultural values of our national parks and historical places, and providing for the enjoyment of life through outdoor recreation. The Department assesses our energy and mineral resources and works to assure that their development is in the best interest of all people. The Department also has a major responsibility for American Indian reservation communities and for people who live in Island Territories under U.S. administration.

The Annual Program Summary (APS) is required by the Salem District Record of Decision and Resource Management Plan (ROD/RMP). The APS reports progress of ROD/RMP implementation in the Salem District of the Bureau of Land Management (Salem-BLM or Salem District). It summarizes the results of the district implementation monitoring accomplished in accordance with the district monitoring plan. It also documents the RMP maintenance that has been accomplished to date.

Comments, including the names and street addresses of respondents, will be available for public review at the Salem District Office, 1717 Fabry Rd. SE, Salem, during regular business hours (7:30 a.m. to 4:00 p.m.), Monday through Friday, except holidays. Individual respondents may request confidentiality. If you wish to withhold your name or street address from public review or from disclosure under the Freedom of Information Act, you must state this prominently at the beginning of your written comment. Such requests will be honored to the extent allowed by law. All submissions from organizations or businesses, and from individuals identifying themselves as representatives or officials of organizations or businesses, will be made available for public inspection in their entirety.

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Salem District Office
1717 Fabry Rd. SE
Salem, OR 97306

A Message from the District Manager, Salem-BLM

The FY99 Annual Program Summary highlights the many activities in which the Salem-BLM is involved. A two million dollar "pipeline" recreation fund allowed completion of a backlog of maintenance and long-needed infrastructure replacement, public safety improvements, and accessibility upgrades at virtually all of Salem-BLM's heavily visited recreation sites during this year.

Although timber sale lawsuits limited the amount of timber sold, 10.4 million board feet was offered for sale.

Through the Jobs-in-the Woods program, Salem-BLM placed trees and logs in 4.25 miles of stream to improve rearing habitat for at-risk stocks of salmon and steelhead. Forty-one acres of riparian enhancement projects to restore conifers along alder dominated streams was completed. Forty-three miles of roads were decommissioned. Road decommissioning is a tool used to reduce the potential for sediment delivery to streams, to minimize wildlife harassment, and to reduce the maintenance costs of roads not presently needed for management operation.

In FY99, Salem-BLM issued 550 Special Forest Products contracts and received $25,400 in payment. A total of 12,900 pounds of mushrooms, 25,300 cubic feet of firewood, and 136,000 pounds of floral greenery (mostly salal) were sold.

In cooperation with private land owners and the State of Oregon, Salem-BLM biologists completed northern spotted owl, bald eagle, northern goshawk, forest carnivore, and mollusk surveys on thousands of acres.

Many different partnerships with other agencies and organizations and local area schools form the basis of a lot of Salem BLM's accomplishments in FY99. This includes 1,200 BLM volunteers who worked 54,000 hours on a wide variety of projects.

Denis Williamson

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Table 1 - SALEM-BLM,
SUMMARY OF RENEWABLE RESOURCE MANAGEMENT ACCOMPLISHMENTS

RMP Management Activity	Fiscal Year 1999 Accomplish-ments	Cumulative Accomplish-ments 1995-1999 Timber/ 1996-1999 Others	Projected Decadal Practices
Regeneration Harvest (acres offered)	165	1,806	5,558
Commercial Thinning / Density Management / Uneven-age Harvests (acres offered)	210	2,619	9,113
Site Preparation - Burning(acres)	88	952	4,800
Site Preparation - Other (acres)	642	1,889	5,900
Plantation Maintenance / Animal Damage Control (acres)	2,102	13,268	31,300
Pre-commercial Thinning (acres)	1,330	7,780	29,700
Brush Field / Hardwood Conversion (acres)	0	5	900
Planting / Regular Stock (acres)	382	1,723	4,800
Planting / Genetically Selected (acres)	345	818	4,500
Fertilization (acres)	2,974	4,645	6,000
Pruning (acres)	65	350	None
New Permanent Road Constructed (miles*)	1.6	13.9	5
Roads Fully Decommissioned / Obliterated (miles *)	28.9	55.4	No Target
Roads Closed / Gated (miles**)	22.7	152.9	No Target
Timber Sale Quantity Offered (million board feet) (allowable sale quantity)***	6.9	130.2	348.1
Timber Sale Quantity Offered (million cubic feet)	1.1	21.5	57
Noxious Weed Control, Chemical (sites/acres)	1/1	1/1	As Needed
Noxious Weed Control, Other (sites/acres)	4/62	26/264****	As Needed

* BLM administered lands only
** Roads closed to the general public, but retained for administrative or legal access
*** Volume reported from the RMP signing date, May 1995 to present
****numbers reflect multiple visits to 8 sites being treated over time. As noted in FY99 column, fewer sites needing treatment due to success of previous treatments.

Table 2 - SALEM-BLM,
SUMMARY OF NON-RENEWABLE RESOURCE MANAGEMENT ACCOMPLISHMENTS

RMP Management Activity	Activity Units	Fiscal Year 1999 Accomplish-ments	Cumulative Accomplish-ments 1995-1999
Realty, Land Sales	actions / acres	2 / 0.53	16 / 15.82
Realty, Land Exchanges	actions / acres acquired / acres disposed	0 / 0 / 0	7 / 4,524 / 2,241
Realty, R&PP Leases/Patents	actions / acres	0	4
Realty, Road Easements Acquired for Public / Agency Use	actions	6	17
Realty, Road Rights-of-Way, Permits or Leases Granted	actions	2	7
Realty, Utility Rights-of-Way Granted (linear / areal)	actions / miles / acres	2	21
Realty, Withdrawals Completed	actions / acres	0	0
Realty, Withdrawals Revoked	actions / acres	1	16
Mineral / Energy, Total Oil and Gas Leases	actions / acres	0	0
Mineral/Energy, Total Other Leases	actions / acres	0	0
Mining Plans Approved	actions / acres	0	0
Mining Claims Patented	actions / acres	0	0
Mineral Material Sites Opened	actions / acres	0	0
Mineral Material Sites, Closed	actions / acres	0	0
Recreation, Maintained Off Highway Vehicle Trails	units / miles	1 / 25	4 / 125
Recreation, Maintained Hiking Trails	units / miles	12 / 75	30 / 225
Recreation, Maintained Sites	units / acres	18 / 1,500	N/A*
Cultural Resource Inventories	sites / acres	2 / 280	15 / 9,729
Cultural / Historic Sites Nominated	sites / acres	0 / 0	0 / 0
Hazardous Material Sites	identified / cleaned	5 / 4	21 / 17

* Same sites maintained annually - no cumulative number

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1. INTRODUCTION

Per the Bureau of Land Management's Salem District Record of Decision and Resource Management Plan (RMP), this FY99 Annual Program Summary (APS) has been prepared to track and assess progress of plan implementation, report monitoring results, and may include periodic plan maintenance. There is cumulative information covering the period of FY95-98 as well as FY99 specific information for many of the programs discussed in the APS.

2. BUDGET

A. Appropriated Budget and Future Trends

During FY 95-98, the Salem-BLM budget ranged from 14 to16 million dollars. It remained level at $16 million in FY99, despite increased personnel costs to cover inflation (personnel did not increase). This reduced funds available for project work, overhead, and miscellaneous costs.

B. Jobs-in-the-Woods Funds

Twenty-five projects for FY99 were completed. These were located across 10 counties within 4 congressional districts and accounted for $ 777,000 in project dollars.

C. Timber Sale Pipeline Funds - Forest Development and Sales

In May 1998, funds were made available to work on "pipeline" timber sales. These are future or out-year sales; sales that would not be sold until the year 2000 or later. The purpose of these funds is to develop one year's worth of timber sales that are completely prepared and "on the shelf", in other words" ready to be offered". Having these sales available, and in the "pipeline", will give more lead time to react to late developing issues that might delay sales in the current year.

During FY99, the Cascades Resource Area started preparation of environmental assessments for three timber sales scheduled to be offered in 2001. Forest inventory plots to allow silvicultural screening on remaining out-year timber sales were completed. Hydrological updates on the majority of the out-year sales were completed or have been scheduled. Surveys for special status species (threatened, endangered, BLM sensitive, etc) are currently being conducted for all planned sales.

During FY99 in the Tillamook Resource Area, planning, survey and inventory work, interdisciplinary team work, and lay out was completed for 470 sale acres (about eight million board feet of timber). These future proposed sales are planned for 2001 and 2002 and occur in Adaptive Management Area (AMA) and General Forest Management Area (GFMA) lands.

D. Recreation Pipeline Funds - Projects

During FY99, additional appropriations were provided by Congress to accomplish needed recreation maintenance, repairs, and improvements which had been postponed due to reduced funding over several years. These were referred to as "Recreation Pipeline" funds. Table 3 shows how Salem-BLM utilized them.

Table 3 - RECREATION PIPELINE PROJECTS FY99

Project Areas	Types of Work	Dollars Expended*
Wildwood Recreation Site	Continued restroom repairs and Americans with Disabilities Act (ADA) improvements. Repaired electric, water, and irrigation systems and storage building. Continued pavement of roads and parking lots. Replaced vandalized or irreparable tables and signs.	80,000
Fisherman's Bend Recreation Site	Constructed ADA restroom / shower facility. Continued paving road and parking lot. Improved gate security.	610,000
Little North Santiam SRMA (Elkhorn Valley Site)	Replaced vandalized or irreparable tables barbeques, and signs. Continued pavement of roads and parking lots.	130,000
Molalla River Recreation Corridor	Installed or replaced signs and fire rings. Maintained and stabilized trails and campsites.	20,000
Nestucca River SRMA (4 Campgrounds and Sheridan Peak Overlook)	Replaced toilet. Completed Back-country Byway repairs.	45,000
Marys Peak ERMA (Alsea Falls Rec. Site)	Continued ADA improvements, bridge repair, and road paving.	135,000
Larch Mountain Environmental Education Site	Continued upgrading parking area, toilet, and trail. Installed ADA approved shelters.	15,000

* Costs include administrative overhead / labor costs.
SRMA=Special Recreation Management Area
ERMA=Extensive Recreation Management Area

E. Recreation Fee Demonstration Project

In 1996, the Recreation Fee Demonstration Program was authorized by Congress. The program expanded the Bureau of Land Management's (BLM) authority to charge and retain fees for providing recreation services and facilities on a trial basis until September 30, 2002. Yaquina Head Outstanding Natural Area (ONA) has been a recreation fee demonstration site since October 1, 1996. Starting October 1, 1997, all of the developed recreation sites in Salem-BLM became fee demonstration sites. More than $408,000 in recreation facility fees were collected in FY99. With the support of the Association of O & C Counties, all of these fees are being retained by Salem-BLM to be used locally for visitor facility repair and maintenance, accessibility improvements, visitor services, replacement of signs, environmental interpretation and education, and new construction. All of the developed recreation sites will remain fee demonstration sites until the authorization expires, at which time Congress may extend the authority or pass new legislation.

F. Challenge Cost Share Projects, Volunteers, Partnerships

In FY99, Salem-BLM cooperated in nine challenge cost share projects that involved approximately 50 different partners. Partners included federal, state, and local government agencies; private corporations; conservation organizations; private individuals; and local watershed councils. Salem-BLM grants (totaling $67,000) were leveraged with nearly $460,000 worth of funding and value-in-kind contributions from partners. These projects included sensitive plant population monitoring and genetics; non-vascular plant studies; and Cascade Streamwatch aquatic education (a multi-partner cooperative). Partners in these projects included: Oregon State University, Oregon Department of Fish and Wildlife, Berry Botanic Gardens, The Nature Conservancy, Aviafuana Northwest, Forest Service, PGE/ENRON, Pacific Northwest Mycology Service, Oregon Department of Agriculture, AT&T, Portland Water Bureau, Timberline, Inc., Willamette Industries, Web Steel, Collins Foundation, Resort at the Mountain, Inc., NW Natural Gas, US Bank, Pacificorp, Wells Fargo, NIKE, U.S. Fish and Wildlife Service, Portland Parks, Portland State University, Mt. Hood Community College, Metro, Trout Unlimited, Defenders of Wildlife, Audubon, Americorps, Steelheaders, and others.

One of the most successful cooperative partnerships involved the award-winning Cascade Streamwatch science-based education program operated at Wildwood Recreation Site along the Salmon Wild and Scenic River. For all partners , FY99 expenditures totaled more than $400,000.

The volunteer program continued to be very successful. Some 824 volunteers contributed 47,000+ hours to Salem-BLM during FY99, for a dollar value of about $308,000 based on minimum wage estimates. Overall BLM costs to support the volunteer program were just over $99,000. This calculates to a net value of about $209,000 to BLM (equivalent to 1percent of Salem-BLM's total budget).

These volunteers contributed work in a wide variety of programs, none of which could have been accomplished with BLM funds alone. Without the help from volunteers, the work would not have been done. In some cases, the volunteers wanted to gain experience for future jobs. In other cases, the volunteers wanted to merely contribute toward a worthwhile project. Recreation programs garnered about 76 percent of the volunteer hours. Biological programs, environmental education, support services, and surveying were the beneficiaries of the remaining 24 percent.

3. LAND USE ALLOCATIONS (LUAS)

No adjustments to LUA boundaries or acreages within LUAs were made during FY99. Previously adjusted acreages were reported in the FY98 APS. Table 4 (no change from FY98 APS) shows LUA acreage revisions since RMP implementation began.

Table 4 - SALEM-BLM, REVISED ACREAGES WITHIN LAND USE ALLOCATIONS*

Major Land Use Allocation	Acres in RMP Record of Decision	Acres After Update BEFORE Removing "Unmapped" LSRs (Owl,MM)	Acres After Update AFTER Removing "Unmapped" LSRs (Owl,MM)
Late-Successional Reserves Outside of the Adaptive Management Area	132,100	133,557	135,366
Late-Successional Reserves Inside of the Adaptive Management Area	79,700	80,426	80,810
Adaptive Management Area	43,700	41,899	41,516
General Forest Management Area (Matrix)	107,300	105,661	104,804
Connectivity / Diversity Blocks (Matrix)	27,400	27,125	26,185
Other	7,900	11,994	11,995
TOTAL ACRES	398,100	400,662**	400,675**

* See Salem RMP Record of Decision page 5 for original footnotes.
** Acreage differences caused by mapping and rounding.
LSRs=Late-Successional Reserves MM=Marbled Murrelet

4. AQUATIC CONSERVATION STRATEGY (ACS) IMPLEMENTATION

A. Riparian Reserves

Forty-four actions occurred in riparian reserves in FY99. The majority of these actions were silviculture projects such as manual maintenance / hardwood and brush release, fertilization, and thinning. The Hammond Camp right-of-way clearing and South Fork Packers salvage timber sale were the only harvest activities planned in riparian reserves. During implementation monitoring, less than one acre within the Good Gawley timber sale occurred in a riparian reserve. Most actions which were monitored provided clear documentation on how the activity would meet or would not prevent attainment of ACS objectives. Exceptions included low risk activities such as recreation site repairs and roadside salvage of logs for stream structure. On a road decommission in the Nestucca drainage, culvert removal was not completed on two sites.

One new road action (the Hammond Camp Right-of-Way in Unit 1) occurred in a riparian reserve in FY99. This was a non-discretionary action pertaining to the widening of the right-of-way for a Willamette Industry action. Road restoration was focused in the Nestucca and Alsea watersheds (both with a completed watershed analysis).

Salem-BLM monitored three projects involving installation or improvement of structures; the Valley of the Giants footbridge, Williams Creek road restorations, and Camp 3 log culvert replacement. All these projects were found to allow passage of bedload, debris, and fish.

In August 1999, Salem-BLM published a draft implementation strategy for the Western Oregon Management Plan. This plan contains provisions for storm inspections in order to meet ACS objectives concerning diversion of flow paths and impacts to sediment regimes. During the winter of 1999, the Cascade Resource Area and the Mary's Peak Resource Area initiated a storm patrol system with the intention of avoiding losses due to plugged culverts. On a voluntary basis, employees are assigned watersheds to patrol preceding and during a storm event to clear obstructions or call for heavy equipment help for larger problems. This program met with success, however due to the transient nature of storms, a limited workforce, and safety concerns, full coverage was not always possible. In particular, culverts were checked before a Thanksgiving weekend storm, however since it occurred over a weekend little patrol was accomplished during the storm.

At recreational sites within riparian reserves, maintenance and upgrading of water systems were completed.

B. Key Watersheds

Tier 1 key watersheds were identified in the Northwest Forest Plan (NWFP) to serve as refugia for at-risk stocks of anadromous salmonids and resident fish species. Tier 2 key watersheds were identified as important sources of high quality water. The NWFP calls for application of specific management actions involving watershed analysis, roads, restoration, and timber harvest in key watersheds.

As of the end of FY99, three key watersheds (tier 1) remain for watershed analysis to be completed. These are Lower North Fork Wilson, Middle Fork Trask, and Elkhorn, tributary to the Trask. *(In Table 5. it indicates only one watershed analysis in key watersheds remains to be finished. Which is correct?)*

All key watersheds in which1999 actions occurred, had previous watershed analysis completed. The only harvest activity in a key watershed occurred in the Salmon River watershed and included salvage operations in order to acquire logs for a fish habitat improvement project. Other restoration projects included conifer development along Willamina Creek and road decommissioning in the Nestucca watershed.

C. Watershed Analyses

Watershed analysis is required by the Northwest Forest Plan (NWFP) Record of Decision (ROD). The primary purpose is to provide decision makers with information about the natural resources and human uses in an area. This information is utilized in National Environmental Policy Act (NEPA) documentation for specific projects and to facilitate compliance with the Endangered Species Act (ESA) and the Clean Water Act (CWA) by providing additional information for consultation with other agencies.

Watershed analyses include:

* Analysis of at-risk fish species and stocks, their presence, habitat conditions, and restoration needs;
* Descriptions of the landscape over time, including the impacts of humans, their role in shaping the landscape, and the effects of fire;
* The distribution and abundance of species and populations throughout the watershed;
* Characterization of the geologic and hydrologic conditions.

This information was obtained from a variety of sources, including field inventory and observation, history books, agency records and old maps and survey records.

Watershed analysis proceeded at a consistent pace. Ten watershed analyses / assessments were completed during FY99. Primarily in watersheds where BLM acreages were low, many of the watershed analyses were completed by watershed councils, Soil & Water Conservation Districts, and contractors. Close coordination occurred between those cooperating and the BLM to assure that watershed analyses in areas of joint ownership had appropriate participation. Public involvement and review continued to be integral to the watershed analysis process. The status of watershed analyses is shown in Table 5 and

the accompanying list. The twenty remaining watersheds have small, isolated BLM parcels, with little BLM acreage. Most are low priority and may be accomplished in conjunction with watershed councils over time.

Table 5 - WATERSHED ANALYSIS STATUS

	Watershed Analysis Areas	Number of Key Watersheds	BLM Acres	Percent of Total Acres
Completed through FY99	43	16	332,154	81%
Ongoing FY00	6	1	53,852	13%
Remaining FY01+	20	0	24,124	6%
Total	69	17	410,130	100%

Watershed Analyses Completed Through FY99 Include:

COAST PROVINCE

Drift Creek (Alsea)	Drift Creek (Siletz)	East Fork Nehalem River
Nestucca River	North Fork Alsea	South Fork Alsea
Upper Siletz	Yaquina / Big Elk	Five Rivers / Lobster
Yachats	Little Nestucca	Salmon / Neskowin
Netarts / Sand Lk.Fr.	Kilchis	Rock Siletz
Lower Alsea River		
Trask / Elkhorn	Middle Fork of the North Fork Trask River	

WILLAMETTE PROVINCE

Abiqua Butte	Eagle Creek	Hamilton Creek
North Fork Clackamas	Upper Clear Creek	Upper Sandy
Salmon River	Scappoose Creek	Shot Pouch (S.Santiam)
Thomas Creek	North Yamhill	Benton Foothills
Bull Run / Little Sandy	South Fork Clackamas	Lower Clackamas
Upper Fish Creek	Collawash	Little North Santiam
Molalla	Dairy / McKay	Scoggins / U.Tualatin
Calapooia	Marys River	

Combined - Willamina Creek, Panther Creek, Baker Creek, Deer Creek, and South Yamhill (part)

Watershed Analysis Ongoing or Proposed in FY 00 Include:

COAST PROVINCE

Wilson / Lower North Fork Wilson

WILLAMETTE PROVINCE

Mid Tualatin	Quartzville	Crabtree
Milton Creek	Multnomah Channel	

D. Watershed Restoration Projects

Watershed restoration is a long-term program to restore watershed health and aquatic ecosystems, including the habitats supporting fish, other aquatic and riparian organisms, and water quality. The most important components are control of management related runoff and sediment, restoration of desired riparian vegetation and enhancing instream habitat complexity. Instream restoration is covered in section 11.

1) Road Restoration / Obliteration

As funding becomes available and/or restoration projects are identified, roads in the transportation system are being taken out of service by either closing or obliteration (See Table 1 and Appendix 12). The transportation management plan and transportation management objectives (TMOs) play a key role in this identification. Taking a road out of service may be as simple as installing a gate at the front end of the road, but could be as complex as completely removing the road by obliteration. Other projects included road restoration to control and prevent resource damage. Culverts are being replaced where they do not to meet the requirements of the Aquatic Conservation Strategy (ACS).

2) Riparian Habitat Enhancement

In 1999, Salem-BLM's conifer restoration work has continued in the Lobster Creek drainage and expanded to work within the Willamina Creek drainage. These projects focused on control of brush and hardwood species that compete with the young conifer which exist naturally or have been planted. The long term benefits are to provide shade and future large wood recruitment in order to realize ACS objectives. These activities followed recommendations found in the respective watershed analysis for each area.

5. LATE-SUCCESSIONAL RESERVES (LSRS) AND ASSESSMENTS

All habitat manipulation activities in LSRs during FY99 were covered by full LSR assessments completed in accordance with the RMP and NWFP.

Three LSR assessments were completed in FY98 covering most of the Salem District. A few isolated LSRs have not yet been included in an LSR assessment. Projects in LSRs were planned during FY99, in accordance with those previous assessments. The LSR assessment encompassing the Northern Coast Range Adaptive Management Area directed the agencies to jointly develop a management strategy for the designated Reserve Pair Areas (RPAs) within the area. This work began in FY98, progressed through FY99, and is expected to be completed in FY00.

6. NORTHERN COAST RANGE ADAPTIVE MANAGEMENT AREA (AMA) ACTIVITIES

A. Local Watershed Councils

AMA staff members participate monthly with the Nestucca / Neskowin Watershed Council and the Yamhill Basin Council. Watershed councils provide an excellent source of creative ideas and local participation regarding the AMA.

B. Collaboration with Tribes

Staff of the Siuslaw National Forest and Salem-BLM, working with the Natural Resource Division staff of the Confederated Tribes of Grand Ronde, are proceeding with plans for collaborative management of federal and tribal lands within the upper South Yamhill River watershed. Siuslaw National Forest signed a Participating Agreement with the Tribe in June 1999. In FY999, BLM Tillamook Resource Area staff continued developing a negotiated contract with the Tribe designed to accomplish various resource inventories and prepare coordinated activity plans for 4,200 acres of BLM lands in the South Yamhill

basin. This work with the Grand Ronde Tribe offers a variety of benefits, including greater coordination of forest management at an ecosystem level, increased involvement of local communities, more effective use of resource management staff, ability to accomplish more beneficial projects, and potential innovation in management practices.

C. Management Strategy Comparison Study

AMA staff continued to plan for implementation of this long-term, large scale, adaptive management effort (formerly called the Landscape Design Study). The study will test the effectiveness of three different management strategies in promoting development of mature and old-growth forest habitat conditions on landscape blocks. All management strategies to be tested are designed to promote objectives of the Northwest Forest Plan.

D. Nestucca Valley Education Partnership

In FY 99, AMA staff of the BLM's Tillamook Resource Area and the Hebo Ranger District of Siuslaw National Forest collaborated in development of a cooperative education venture with the Nestucca Valley School District, the Confederated Tribes of Grand Ronde, Simpson Timber Company, and other local landowners. The partnership provides a structure under which students from the elementary, middle, and high schools will work with staff from the federal agencies and other partners. The projects undertaken will provide them with hands-on learning about natural resource issues while performing various types of survey, implementation, and monitoring tasks on lands managed by the partners.

7. MATRIX - RETENTION OF LATE SUCCESSIONAL FOREST PATCHES - 15 PERCENT ANALYSIS

The NWFP / ROD (pg C-44) and ROD / RMP (pg 48) require that the BLM and Forest Service provide for the retention of late successional / old growth fragments in the matrix where little remains. The standards and guidelines are to be applied to any fifth field watershed in which federal forest lands are currently comprised of 15 percent or less late-successional forest (LSF), considering all land allocations.

In 1996, Salem-BLM completed an initial screening of watersheds with the Siuslaw, Mt. Hood, and Willamette National Forests. General results were reported in the FY 97 Annual Program Summary. The initial analysis applies to all actions with decisions prior to October 1, 1999. All Salem-BLM FY 95-98 sales sold under the NWFP complied with the 15 percent rule per the initial draft analysis.

A joint BLM / Forest Service Instruction Memorandum was issued on September 14, 1998. This provided additional guidance for implementing the 15 percent standards and guidelines throughout the area covered by the Northwest Forest Plan. Implementation of this guidance was required for all actions with decisions beginning October 1, 1999. Revised 15 percent analyses covering Salem-BLM and adjacent National Forests were completed prior to September 1999 and are being utilized for all projects.

8. AIR QUALITY

Air quality continues to be a major emphasis item for Salem BLM. During FY99, special care was taken to ensure that all prescribed fire projects were done in compliance with the Oregon Smoke Management Plan. There were no intrusions of smoke into any designated area or into any Class 1 air sheds. Experienced prescribed fire managers are writing burn plans, and then implementing those plans when good smoke mixing and dispersal exist. Significant reductions in acres being burned and prompt mop-up of burned units has also helped to reduce residual smoke.

9. WATER AND SOILS

Water and soils are extremely important and high profile issues. Water quality, both for domestic drinking and for fish habitat, is one of Salem-BLM's highest priority programs. Protection of soils to reduce sedimentation into waterways, reduce chances of landslides, and otherwise enhance the productivity of land is closely associated with water quality.

Salem-BLM continues to implement non-point source management through:

Environmental Analysis: Specialists on interdisciplinary teams identify all potentially impacted downstream beneficial uses. This identification allows the team to design appropriate design features to protect these uses. Information can include on-site investigations for fish and stream habitat, review of all available water use data including the Water Resource Department's water right database, and Oregon Department of Fish and Wildlife and Oregon Department of Forestry stream surveys. This process also recognizes downstream waters on the Oregon Department of Environmental Quality's 303d list and assesses potential contributions to water quality limited reaches. Impact assessment is conducted using Oregon's water quality criteria.

Best Management Practices (BMP's): BMP's are designed site specifically to avoid or mitigate impacts to water quality and beneficial uses. They are based on the linkage between the action and beneficial uses.

Implementation Monitoring: Projects are monitored to assess the identification of beneficial uses and BMP design and implementation. In FY99, eleven projects were monitored for BMP implementation and beneficial use identification. In the later part of FY99, Salem-BLM instituted a standard format for beneficial use identification. Since projects monitored in FY99 occurred prior to this standard, not all beneficial uses were identified. In all the projects monitored, the appropriate BMP's were designed to avoid or mitigate potential impacts to beneficial uses identified. Most of these BMP's were implemented on the ground. An exception was a fertilization project in which BMP's concerning wet weather application were not able to be met due to the time of year of the contract. This can be expected periodically as prediction of weather in relation to timing of actions is difficult.

Selected projects: To determine if measures planned, work as expected or need to be changed in the future, some projects are monitored for BMP effectiveness. During 1999, the field collection of water quality data continued for the McCully Mountain timber sales in the Jordan Creek watershed. This has tracked streamflow, water temperature, and sediment in relation to harvest levels and roading. Data collection is expected to be completed in water year 2001. Water temperature monitoring in relation to large woody debris loading was and is still being conducted on Lobster Creek.

Stream water temperature was measured at nine sites to provide data for water quality assessment in the Quartzville and Crabtree watershed analyses for the Cascade Resource Area. In FY99, water temperature monitoring also emphasized collection of data on Salem-BLM administered lands in sub-basins with water quality limited streams as per the Forest Service and Bureau of Land Management Protocol for addressing Clean Water Act Section 303d Listed Waters (May 1999, version 2). Water temperature was measured on 47 sites and continuous low flow at 4 USGS stream gauge stations in 303d listed sub-basins within Salem-BLM. This data and hydrologist expertise has been shared with watershed councils in an effort to cooperate with the Governor's Plan and develop watershed-based plans. In the case of the South Santiam, Salem-BLM has provided equipment for obtaining water quality information.

As detailed throughout this document, Salem-BLM has protected flood plains and wetlands through

on-the-ground implementation of the NWFP riparian reserves for wetlands and flood plains. In FY99, for planning purposes, field mapping of the riparian reserves was incorporated into the update of water bodies within the Geographic Information System (GIS) hydrology theme to help with future on-the-ground management.

A. 303d Listed Streams

Salem-BLM manages lands in 12 sub-basins that currently contain 303d listed streams identified by the Oregon DEQ. The development of Total Maximum Daily Loads (TMDL's) and Water Quality Managment Plans are required on these sub-basins. Oregon DEQ has set target priority dates for development of TMDL's and Water Quality Management Plans in the listed sub-basins. Table 5a provides the subbasin, stream segment name, and current plan development status for the sub-basins containing a significant occurrence (greater than 640 acres) of Salem-BLM administered lands.

B. Municipal Watersheds

Salem-BLM has an ongoing management agreement with private land owners in the Rickreall watershed which provides the water supply for the City of Dallas. The current agreement consists of seasonal vehicle closures on the road system.

Salem-BLM has signed three Memorandums of Agreement (MOAs) concerning management of the Sandy (Alder Creek), Clackamas, and the Molalla watersheds. These watersheds contain the municipal water supplies for Sandy, Clackamas, Estacada, Lake Oswego, Oregon City, Molalla, and Canby. These agreements focus work on cooperative water quality monitoring and coordination concerning management actions taking place. During FY99, fertilization of public lands initially was identified for units that provide part of the City of Sandy's water supply. These fertilization projects were dropped after reviewing the agreement and concerns expressed by the city.

A draft MOA with the City of Salem for the North Santiam River watershed was further developed during 1999. In response to a recent GAO report concerning the 1996 flood and the effects on the City of Salem's water supply, Salem- BLM is incorporating GAO's recommendations whenever possible. These consist of:

* Include key landowners in MOA's (when landowners desire).
* Gather comparable data concerning water quality and management.
* Include water quality as an issue in watershed analysis when there is a municipal use.
* Conduct watershed analysis to include the boundary of the municipal watershed.

C. Updated Stream Information

During 1999, Salem-BLM continued the extensive update of the stream and lakes (hydrography) Geographic Information System (GIS) theme. A spatial update was completed over the span of 38 - fifth field watersheds encompassing more than 2,305,440 acres (compared to 747,690 acres in 1998). Watersheds scheduled for TMDL development and watershed analysis were targeted for this update using state-wide protocols developed over the last three years. Salem-BLM coordinated this update in the Coast Range with the Siuslaw National Forest and watershed councils including the Mid-Coast, Nestucca-Nescowin and the Tillamook Bay Performance Partnership. The update in the Cascade Range included both the Mt Hood and the Willamette National Forests. The Resource Areas of Salem-BLM are updating the fish attributes associated with these water bodies as part of the watershed analysis process and through field project work.

Table 5a - PLANNING FOR TOTAL MAXIMUM DAILY LOADS (TMDLs)

Sub-basin	Stream Segment (parameter)	DEQ Priority Date for TMDL
Tualatin	East Fork Dairy Creek (temperature) McKay Creek (temperature)	1999 (due in 2000)
Nestucca, Tillamook Sub-basin	Trask River (temperature) Wilson River (temperature) Nestucca River (temperature, sediment) East Fork Beaver Creek (sediment)	2000 (Tillamook portion of sub-basin)
North Santiam	Little North Santiam (temperature) Elkhorn Creek (temperature) North Santiam River (temperature)	2003
South Santiam	Thomas Creek (temperature) Hamilton Creek (temperature) Crabtree Creek (temperature) Quartzville Creek (temperature)	2003
Clackamas	Clackamas River (temperature)	2003
Middle Willamette	Rickreall Creek (temperature)	2003
Upper Willamette	Mary's River (temperature)	2003
Alsea	Alsea River (temperature) Fall Creek (temperature) Lobster Creek (temperature) Little Lobster Creek (temperature)	2006
Siletz	Siletz River (temperature) Drift Creek (temperature)	2006
Yamhill	Mill Creek (temperature) North Yamhill River (temperature) Turner Creek (temperature)	2007
Mollalla	Mollalla River (temperature) North Fork Mollalla (temperature) Table Rock Fork (temperature) South Fork Mollalla (temperature) Pine Creek (temperature)	2007
Sandy	Salmon River (temperature) Sandy River (temperature)	2007

D. Modify Site Treatments
Management actions around fragile sites have primarily been implemented through identification of these sites on-the-ground and avoidance in terms of designing riparian reserves as applicable (eg. wetlands, unstable and potentially unstable slopes). Project planning around these sites requires an accurate map which has often not been available until site specific environmental analysis has occurred. Over the last year, specialists have noted that significant correction to the Timber Productivity Capability Classification fragile site mapping has had to be made during the EA process particularly in terms of wetlands identification. As with stream identification, this has expanded workload and time for planning and implementing projects. FY99 monitoring results showed that in most cases, areas identified as wetlands were protected.

E. Best Management Practices and Clean Water Act Compliance
Best Management Practices (BMPs) are project features which are designed to avoid or minimize degradation of water quality, flow regimes, and soil productivity. Implementation of BMPs is "management in action" to meet the objectives outlined in the Aquatic Conservation Strategy. Monitoring feedback on BMP performance is integral to adjusting management actions to improve our ability to maintain and restore the ecological health of watersheds. Monitoring of BMP implementation and effectiveness followed by adjustment of BMPs where appropriate is necessary for compliance with the Clean Water Act.

In FY99, implementation of BMPs was monitored on eleven projects including two timber sales that represent the highest risks in terms of water quality. Most BMPs were implemented. A minor exception includes the climatic restrictions associated with fertilizer application.

FY99 represents the fifth year of BMP effectiveness monitoring on the McCully Mountain timber sale in the Cascade Resource Area. This paired watershed study includes monitoring for changes in stream flow, sediment, and temperature. Harvest and road activities concluded and implementation of BMPs occurred in 1997. Data collection is scheduled through FY2000. This study will also provide data for the South Santiam TMDL and water quality management plan (WQMP) scheduled for 2003. Data from water temperature sites in Turner Creek demonstrates the effectiveness of riparian reserves in maintaining and reducing stream temperature. Temperature monitoring of complex debris jams in Lobster Creek has also revealed the effectiveness of temperature reduction realized by flood plain development in and around large wood jams.

10. WILDLIFE AND WILDLIFE HABITAT

In FY99, all of the timber sales in LSRs and AMAs were designed to enhance late successional forest characteristics for wildlife habitat. Wildlife habitat includes all kinds of species, from elk to snails, and also has benefit for fungus, bryophytes, and vascular plants. Specific standards and guidelines needed to ensure these projects meet NWFP\RMP objectives are as follows:

A. Green Tree Retention (GTR)
Wildlife biologists usually help mark regeneration harvest units to optimize spacing of retention trees and reserve the most valuable wildlife trees. During FY99, two timber sales were monitored in matrix lands. Both had adequate numbers of green trees (six to eight) retained after harvest. This finding is consistent with previous years' monitoring.

B. Snags and Snag Recruitment
Approximately two snags \ acre are being left on each regeneration harvest unit. In areas where adequate numbers of snags are not naturally present, additional green trees are being reserved during harvest. These are either allowed to die, or are topped or killed, usually within 3-5 years after harvest. In FY99, Salem-BLM topped trees in 660 acres and identified another 580 acres for future topping. The

green trees reserved for snags are above the number reserved for GTRs or future coarse woody debris (CWD). High quality snags are protected by surrounding them with reserve GTR patches. In young stands, small trees are marked for the development of future snags when they grow to the appropriate size.

C. Coarse Woody Debris (CWD)
CWD is the hardest wildlife habitat component to meet. When adequate downed material is not available, some existing felled trees have to be left on the ground or additional standing trees need to be reserved to be felled or blown down by future storms. During FY99 monitoring, both harvest units were found to have sufficient CWD.

D. Connectivity
Very little timber sale activity (only one right-of-way) occurred in connectivity blocks during FY99.

E. Special Habitats
No projects containing special habitats were identified during FY99.

F. Nest Sites, Activity Centers, and Rookeries
One new spotted owl activity center and one raptor nest tree were discovered in 1999. No new rookeries have been found since 1995. Known nesting trees have been protected. For active nests, particularly for raptors and special status species (like the spotted owl), seasonal restrictions have been placed on nearby projects to discourage nest abandonment. Seventeen spotted owl activity centers (1,857 acres of 100+ acre core areas) identified in accordance with the RMP, have been protected for many years. No nest boxes or platforms have been installed since implementation of the RMP. Some tree topping has occurred to provide nesting structures for forest raptors.

G. Elk Habitat
To restore watershed conditions, often unstable or no longer required roads are decommissioned or obliterated. Twenty-nine miles of road were decommissioned or obliterated in FY99. Another 25 miles are planned for FY00. While elk are not the primary reason for decommissioning or obliterating roads, they are a beneficiary.

H. Late Successional Reserve (LSR) Habitat Improvement
During FY99, within LSRs, 103 acres of density management in 50 to 70 year old stands to create old growth characteristics in these stands were completed. Another 267 acres is planned for FY00. In FY99, Salem-BLM also implemented 1,102 acres of pre-commercial thinning in very young stands in LSRs to encourage them toward older forest structure.

11. FISH AND FISH HABITAT

In FY99, much of the fisheries program effort was directed towards preparation of project level National Environmental Policy Act (NEPA) documentation, watershed analyses, inventory, monitoring, and Endangered Species Act (ESA) compliance. These actions usually required coordination with the Forest Service, National Marine Fisheries Service, Fish and Wildlife Service, and/or Oregon Department of Fish and Wildlife (ODFW).

Salem-BLM personnel continued to do limited spawning and adult rearing surveys in coastal and Columbia basin streams. Salem-BLM entered into cooperative agreements with the), Pacific NW Forest and Range Experiment Station, Mt. Hood National Forest, and Portland General Electric for one adult trapping and two smolt trapping operations, part of baseline data collection efforts.

In FY99, stream habitat inventories were completed through contract with the ODFW. Since 1994, approximately 358 miles of fish habitat has been inventoried utilizing the ODFW inventory methodology. These inventories provide important data on baseline conditions for project development, NEPA analysis, monitoring and ESA consultations.

Three instream fish habitat projects were implemented in the Salmon River, Willamina Creek, and the Alsea River basins in FY99. In all three projects, logs were added to streams where little woody material was present to improve habitat for fish.

Local cooperative efforts focused on watershed analyses and ongoing support and technical assistance to various watershed councils. Fisheries personnel continued involvement in discussions related to heightening of McGuire Dam and potential mitigation on the Nestucca River.

12. SPECIAL STATUS AND SEIS SPECIAL ATTENTION SPECIES AND HABITAT

Surveys for Special Status (SS) and Special Attention (SA) species (see glossary) were completed prior to all ground disturbing activities. Roughly 7,000 acres of pre-project surveys were conducted during FY99, bringing the total during 1996 through 1999 to 22,800 acres. In addition, species oriented inventories were conducted on approximately 260 acres in FY99, for a total of 860 acres during the four year summary period.

Implementation of "The Conservation Strategy for *Cimicifuga elata* (Tall bugbane)", developed by western Oregon BLM Districts, National Forests, and Army Corps of Engineers was continued in 1999.

Salem-BLM has formed and maintained many partnerships with other government agencies, conservation organizations, and academic institutions to learn more about SS and SA species. Partners for population dynamics studies include the Forest Service and Berry Botanic Garden for *Erythronium elegans, Dodecatheon austrofrigidum,* and *Sidalcea nelsoniana*. Along with other BLM Districts and National Forests in western Oregon and Washington, Salem-BLM cooperated with Oregon State University to learn about the genetic diversity of *Corydalis aquae-gelidae* and *Cimicifuga elata*.

In 1999, two mycological studies were started in a partnership with Dr. Lorelei Norvell. This first phase of a five year study of ecotomycorrhizal fungi species investigated response to various treatments in a density management study area. The second study of five years planned duration was also initiated to research fungi in early (25 years of age), mid (50 years of age) and late successional (200+ years of age) western hemlock forests. Special Attention species are the focus of both studies.

Seven SS plant species at twenty-one sites were monitored on a one to three year basis to determine population trends and general habitat condition during FY-99.

The total number of known sites of SS and SA plants and fungi on Salem-BLM managed lands at the end of FY99 are presented in tables 6 through 8. Each site is a separate database record.

Table 6 -TOTAL NUMBER OF SITES BY TAXA GROUP FOR SPECIAL STATUS PLANTS AS OF 9/30/99

Taxa Group (#species)	Federal Listed	Federal Candidate	Bureau Sensitive	Assessment Species	Tracking Species
Fungi (10)			5		36
Lichens (6)				6	15
Bryophytes (3)				2	1
Vascular Plants (24)	1		34	2	42

Table 7 - TOTAL NUMBER OF SITES BY TAXA GROUP FOR SPECIAL ATTENTION PLANTS AS OF 9/30/99

Taxa Group	Protection Buffer	Survey and Manage Strategy 1	Survey and Manage Strategy 2	Survey and Manage Strategy 3	Survey and Manage Strategy 4
Fungi	93	159	15	436	92
Lichens	0	68	9	70	860
Bryophytes	30	21	2	17	85
Vascular Plants	0	8	8	1	0
Totals	123	256	34	524	1037

Note: Some special attention species are included in more than one status category.

Table 8 - TOTAL NUMBER OF SPECIES BY TAXA GROUP FOR SPECIAL ATTENTION PLANTS AS OF 9/30/99

Taxa Group	Protection Buffer	Survey & Manage Strategy 1	Survey & Manage Strategy 2	Survey & Manage Strategy 3	Survey & Manage Strategy 4
Fungi	4	22	0	22	0
Lichens	0	10	0	1	29
Bryophytes	3	2	0	0	1
Vascular Plants	0	2	0	0	0
Totals	7	34	0	23	30

Note: Species are tallied in only one category...many have designations in more than one category.

A. Survey and Manage Species (S&M) and Protection Buffer Species

Survey and manage and protection buffer species include lichens, fungi, bryophytes, mollusks, amphibians, and mammals. Protocols have been, or are being completed for each of the categories and are utilized by field personnel during project level survey efforts. Plant information is noted in tables 6-8 and in the previous discussion. Animal information follows:

CANADA LYNX : No projects were planned or implemented within known primary lynx habitat in FY99.

OREGON RED TREE VOLE: This species is a component 2 species under the Northwest Forest Plan and, as such, surveys and management are required. Approximately 1,150 acres were surveyed to draft protocol standards in FY99. Seventy-five potential nest structures were identified, but none were confirmed as active or inactive in FY99.

LARCH MOUNTAIN SALAMANDER: This species may occur within the Cascade Resource Area. Interim guidance and the draft protocol indicate that proposed ground disturbing activities in areas with suitable habitat must have surveys. No surveys were conducted in FY99.

GREAT GREY OWL: This species is primarily found above 3,500 feet in elevation, however sightings have occurred within the Willamette Valley portion of the Salem-BLM. In FY99, no projects impacting great gray owl habitat were implemented.

MOLLUSKS: In FY99, approximately 2,750 acres were surveyed to protocol for the eight mollusk component 1 and 2 species identified as potential inhabitants of Salem-BLM. About one survey and manage mollusk was identified for every eight acres surveyed. Of the eight species potentially occurring, only five have been verified.

B. Threatened \ Endangered Species

1) WILDLIFE

In FY99, interagency teams continued using the section 7 consultation streamlining process. Level-1 teams, consisting of local employees from BLM, FS, NMFS, and FWS, regularly met to accomplish consultations. Four wildlife programmatic consultation packages, prepared in FY98, were implemented. There was one each for disturbance and habitat modification, for the Willamette Province and Coast Range Province. This helped avoid numerous redundant consultation efforts for normal, repetitive actions. The biological opinions received from FWS were then used in project planning for FY99 and the upcoming year's projects.

Bald Eagle: During FY99, five known bald eagle nesting sites were surveyed for activity and reproductive success. In coordination with other federal and state agencies, winter bald eagle counts were completed on five designated routes. The largest known winter roost site on Salem-BLM, with counts as high as 42 eagles, is along one of these survey routes.

Marbled Murrelet: Salem-BLM has 29 known occupied sites in LSR and AMA land use allocations of the Coast Range. Six new sites, mapped since the RMP/ROD was finalized, account for an additional 1,809 acres of "unmapped LSRs". Two years of surveys are required for marbled murrelets on all projects that will modify suitable habitat in the Coast Range. During 1995 through 1999, surveys were completed where required for specific projects, in accordance with established protocol. Valley of the Giants is the only place that uninterrupted records of use has been able to be conducted.

Northern Spotted Owl: In cooperation with Pacific Northwest Research Station, 30 spotted owl Coast Range sites that are used in the NWFP's demographic study are surveyed annually. For use

in project planning, sixty sites in the Cascades were also surveyed in cooperation with adjacent landowners and state agencies. (Also see section 10F, Nest Sites)

2) FISH

In FY99, interagency teams continued using the Section 7 consultation streamlining process.. Level 1 teams, consisting of members from BLM, FS, NMFS, and FWS regularly met to assure consultation was accomplished efficiently.

The fisheries consultation workload increased significantly in 1999 with the listing of the Upper Willamette River spring chinook, Upper Willamette River winter steelhead, Columbia River chum salmon and Lower Columbia River chinook salmon "Evolutionarily Significant Units (ESUs)". One additional ESU was proposed for listing: Southwestern Washington / Columbia River cutthroat trout. Four other fish are listed within the Salem-BLM's boundaries: Oregon Coast coho salmon, Lower Columbia River steelhead trout, Columbia River bull trout, and Oregon chub. These listings affect nearly all lands and actions of Salem-BLM.

One programmatic biological assessment (BA) was prepared and section 7 consultation completed for actions which may affect Upper Willamette chinook salmon and steelhead trout. This assessment was developed in cooperation with the National Marine Fisheries Service, the Siuslaw, Mt. Hood and Willamette National Forests, and Eugene-BLM. This assessment covers numerous "minor or routine actions" with fish disturbance and habitat modification issues. Numerous BA's for major activities such as timber harvest were also submitted for consultation. Many of these have been delayed as a result of continuing legal issues affecting the National Marine Fisheries Service. These delays have affected Salem-BLM's ability to implement some actions.

13. SPECIAL AREAS

A. Areas of Critical Environmental Concern

Management plans for Areas of Environmental Concern (ACEC) are in various stages of completion and revision. General status of plans through FY99 is shown in the following table:

Table 9 - STATUS OF ACEC MANAGEMENT PLANS

Number of ACECs (Table 2-RMP)	Number of ACECs Which Had Plans in 1995	Number of 1995 Plans Which Are Still Valid	Number of 1995 Plans That Have Been Updated	Number of 1995 Plans That Still Need To Be Revised	1999 Plans and Number of ACECs That Need New Plans
26	17	6	11	5	0 / 4

B. Wild and Scenic Rivers

For Salem-BLM, comprehensive in-stream flow studies or analyses for Wild and Scenic Rivers (Sandy, Salmon, Elkhorn and Quartzville) have not been completed. However, Salem-BLM has developed and conducted baseline water quality and flow monitoring programs, fish and aquatic habitat analyses, and botanical surveys along some of the designated rivers. Wild and Scenic River plans, specifically the Sandy River, Salmon River, and Quartzville Creek were reviewed for compliance with Aquatic Conservation Strategy objectives and were found to be consistent with policy. All plans were found to meet or exceed goals and objectives. Plans are being partially implemented as funding allows. Partnerships with the Nature Conservancy and others continue to address noxious weed abatement and

resource monitoring. BLM continues to work with Metro, River Conservancy, and others on a comprehensive Sandy River Conservation and acquisition strategy to protect resources.

C. Wilderness

Salem-BLM continues to manage Table Rock Wilderness Area. No major issues or actions in this 6,000 acre wilderness occurred in FY99, although limited trail and trail head signing and maintenance was completed. RMP recommendations to add 560 additional acres in the Camp Creek and Rooster Rock area, as well as to officially designate 640 acres of Sec. 16 to the wilderness is pending appropriate wilderness legislation. Renovations and stabilization of the historic Peachuck Lookout, just outside of the wilderness area, continued with the installation of new window coverings, painting, and other maintenance.

14. Cultural Resources

Relationships with Native American groups have broadened as a result of the NWFP. The Siletz, Grande Ronde, and Confederated Tribes of the Coos, Lower Umpqua, and Siuslaw are represented on the Coast Range Provincial Advisory Committee (PAC), where they participate with other interests to provide advice on activities within the province. Tribal notification was made for FY99 projects as appropriate.

Salem-BLM continued to actively promote appreciation of cultural resources through public education and interpretive programs. A total of 27 public presentations directly reached nearly 2,500 people. School teachers were trained in use of the "Exploring Oregon's Past" teacher's activity guide at two in-service workshops. Several hundred copies of the guide were distributed. A traveling display was developed and exhibited at schools in the Salem-Keizer School District and at Yaquina Head Outstanding Natural Area (ONA).

Intensive cultural resource inventories covered 280 acres in FY99. That brings the cumulative total of inventory between FY95 through 99 to 9,729 acres.

15 VISUAL RESOURCES

Visual Resource Management (VRM) guidelines continued to be implemented as part of all reviewed projects and actions.

16. RURAL INTERFACE AREAS

During FY99, four projects were completed within rural interface areas. During implementation monitoring of some of these units, questions addressing rural interface issues were addressed (i.e. hazards, dust abatement, design features and fuel hazards). Results show that rural interface issues have been adequately addressed during project planning and no significant conflicts occurred.

17. SOCIOECONOMIC CONDITIONS

A. Employment / Trends

General employment trends were evaluated and discussed in the FY98 Annual Program Summary. No trend discussion is included in this year's APS, but statistics in the appendices are updated for FY99. Salem-BLM continues to provide employment opportunities to local companies and individuals as it implements the components of the Northwest Forest Plan. Timber sales; silvicultural treatments such as pruning, thinning, and planting trees; collecting ferns, mushrooms, and firewood; and the recreational use of public lands; provide work opportunities.

Salem-BLM, in coordination with other federal, state, and local governments, continued to participate in the "Jobs-in-the-Woods (JIW) / Watershed Restoration Program" during FY99. The program provides on-the-job training opportunities for folks displaced from forestry related work. These people were hired to work on crews restoring fish and forest habitat. In addition to hiring crews, funds from this program were used to hire local area contractors to do restoration work. More specific JIW information is discussed in section 17C below.

The Oregon and California (O&C) Grant Lands Act of 1937 provides that revenues from the O&C lands be distributed back to the 18 O&C counties. Historically, O&C receipts from the harvest of timber in western Oregon have been and remain a significant source of revenue to both the U.S. Treasury and the O&C Counties. However, due to resource conflicts, harvest levels have dropped significantly from historical levels, significantly impacting some local economies. The traditional O&C Act payment formulas were modified in the Omnibus Budget Reconciliation Act of 1993. The Act provides the western Oregon counties a "special payment amount" based on an annually decreasing percentage of a five year average (1986-1990), replacing the old O&C payment. Counties received the "special payment amount" from 1994 to 1999. From 1999 through 2003, payments to counties will be the greater of either the "special payment amount" identified, or fifty percent of total receipts. Actual payments made for the past three years are shown in Table 10.

B. Receipts & Distributions

Table 10 reports various receipts and distributions and a variety of budget items, all which relate to local employment, as well as various payments to counties. As federal funding for activities and contracts decreases, there is some effect on the local economy, primarily on forest related contractors and businesses.

C. Jobs-in-the-Woods Program

The Jobs-in-the-Woods (JIW) program contributed to the completion of numerous types of ecosystem improvement projects:

1) Road Erosion and Sediment Stabilization projects include such work as closing/blocking roads, installing gates, replacing culverts, improving road ditches.(5 projects in FY99)

2) Riparian Silviculture projects include such work as timber stand density (thinning young stands), converting stands to mixed conifer, creating down woody debris.(4 projects in FY99)

3) Stream Channel Restoration projects include such work as installation of fish passage culverts and in-stream structures, repair of log and boulder structures and pools, habitat inventories.(3 projects in FY99)

4) Upland silviculture projects include such work as upland stand density management, habitat diversification, down and woody debris creation, and site prep.(6 projects in FY99)

5) Inventory/Data Collection projects include such work as collection of biological and physical data in streams, riparian areas and upland sites, stand exams, habitat inventories. (5 projects in FY99)

6) Recreation Facilities Development projects include such work as improvement of campgrounds and trails, signing, outdoor education sites.(2 projects in FY99)

The 25 projects completed were located across ten counties within four congressional districts and accounted for $177,000 of FY99 project dollars.

D. Environmental Justice

Executive Order 12898 issued February 11, 1994, states: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations directs all federal agencies to ". . . make

achieving environmental justice part of its mission by identifying and addressing . . .disproportionately high and adverse human health or environmental effects of it's programs, policies and activities."

New projects with possible effects on minority populations and/or low-income populations will incorporate an analysis of Environmental Justice impacts to ensure any disproportionately high and adverse human health or environmental effects are identified, and reduced to acceptable levels if possible. In Salem-BLM this was completed for all projects subject to NEPA in 1999.

Table 10 - SALEM - BLM, SUMMARY OF SOCIO-ECONOMIC ACTIVITIES AND ALLOCATIONS

Program Element		Fiscal Years 1996-98 $	Fiscal Year 1999 $
District Appropriated Budget		44,966,000	14,727,000
1996 Flood Damage Repair Special Appropriations		49,278,000	135,000
Timber Sale Collections, O&C lands		36,353,030	9,321,181
Timber Sale Collections, P.D. lands		596,943	1,328,107
Payments to Counties (O&C)	Benton Co.	5,923,385	1,818,583
	Clackamas Co.	11,699,214	3,591,864
	Columbia Co.	4,342,410	1,333,196
	Lincoln Co.	758,868	232,986
	Linn Co.	5,565,030	1,708,562
	Marion Co.	3,077,631	944,887
	Multnomah Co.	2,297,684	705,429
	Polk Co.	4,553,207	1,397,914
	Tillamook Co.	1,180,461	362,422
	Washington Co.	1,328,019	407,725
	Yamhill Co.	1,517,736	465,972
	Sub-Total Salem-BLM	$42,243,645	$64,718,262
Payments to Counties (PILT)	Benton Co.	19,893	1,776
	Clackamas Co.	240,524	47,219
	Columbia Co.	13,587	0
	Lincoln Co.	78,950	17,999
	Linn Co.	221,010	47,169
	Marion Co.	91,532	20,301
	Multnomah Co.	33,630	7,269
	Polk Co.	50,972	0
	Tillamook Co.	49,187	8,313
	Washington Co.	21,657	1,120
	Yamhill Co.	17,651	2,548
	Sub-Total Salem-BLM	$ 838,593	$3,720,267
Value of Forest Development Contracts		1,813,185	590,737

Program Element	Fiscal Years 1996-98 $	Fiscal Year 1999 $
Timber Sales Value (Oral Auction) Number of Oral Auctions (#) Negotiated Sales Value Number of Negotiated Sales (#)	35,915,960 (39) 177,225 (30)	2,412,924 (3) 120,948 (9)
Jobs-in-the-Woods Funds in Contracts	4,072,847	661,000
Timber Sale Pipeline Restoration Funds	1,246,173	889,000
Recreation Fee Demonstration Project Receipts	262,897	408,411
Value of Land Sales	157,210	1,500
See appendices for acronym explanations		

Table 10 - SALEM-BLM, SUMMARY OF SOCIO-ECONOMIC ACTIVITIES AND ALLOCATIONS **(Continued)**

18. RECREATION & OFF-HIGHWAY VEHICLE (OHV) MANAGEMENT

A. Developed Recreation Areas

Numerous efforts have and continue to be implemented to develop or enhance recreation and wildlife viewing amenities, facilities, or areas. Salem-BLM continued to improve and enhance the Cascade Streamwatch project during FY99. The extensive interpretive and trail facilities, mostly constructed in FY98 and earlier, include outdoor education shelters, underwater stream viewing building, and a wetlands boardwalk trail. These accessible trails and facilities, located at Wildwood Recreation Site, offer barrier-free boardwalk access for educational groups and the general public to view and learn about wildlife, salmon, wetlands and watersheds. More than 10,000 Portland area school children visited the site as part of their environmental education programs during FY99.

Other recreation improvements, many funded by Recreation Pipeline monies, were completed in FY99. Recreation backlog maintenance upgrades and repairs were completed to improve water and sewer systems; repair buildings and facilities; pave parking areas, roads and trails; and enhance access for persons with disabilities. New bridges were installed at the Alsea Falls Campground and the Valley of the Giants Outstanding Natural Area. Numerous repair and improvements completed at existing recreation sites and dispersed use areas along the Molalla River, Quartzville Creek, Little North Santiam Recreation sites, Wildwood Recreation Site, Fishermen's Bend Recreation Site, Nestucca River, and Alsea Falls campgrounds, and many other sites protect resources and support economic development activities (tourism) in nearby local communities (Mill City, Mehema, Molalla, Lebanon, Sweet Home, and others). Salem-BLM continued to work cooperatively with Linn County, Marion County, and Clackamas County tourism coalitions in the development of recreation related facilities and information.

B. Proposed Recreation Sites and Trails

In 1999, the Molalla Rifle Club, a new five acre target shooting range, was developed and will operate under a lease agreement. State of the art environmental and safety protection are incorporated into design requirements.

Salem-BLM also installed outdoor activity shelters, a foot bridge, and toilets and improved trails at the Larch Mountain Environmental Eductaion Site.

C. Special and Extensive Recreation Management Areas (SRMAs and ERMAs)
Management, improvement, monitoring, and visitor services of SRMAs was continued throughout the district. Particular efforts were focused on the Molalla River / Table Rock, Sandy River, Mount Hood Corridor, Quartsville, and Nestucca SRMAs. Resource protection, restoration, signing, and law enforcement highlight activities in Salem-BLM's ERMAs.

D. Back Country Byways
During FY99, Salem-BLM continued to maintain signs and facilities along the Quartzville, South Fork Alsea, and Nestucca Back Country Byways.

E. Off-Highway Vehicle (OHV) Areas
The Salem-BLM RMP/ROD did not map areas designated for off-highway vehicle (OHV) use, but indicated that the areas would be mapped at a later time. New use guidelines and OHV policy for the Cascades Resource Area were developed in FY99 and published in the May 99 Federal Register. Additional OHV trail developments and improvements in the Bald Mountain OHV area were implemented by the Tillamook Resource Area in FY99.

19. FOREST MANAGEMENT

A. Timber Harvest Activities
Timber sale offerings during FY99 were limited due to several court cases dealing with "Survey and Manage" species and Aquatic Conservation Strategy / Fishieries issues. Amounts offered are shown in Appendices 1 through 6.

B. Silviculture Activities
Silviculture is the art and science of controlling the establishment, growth, composition, health, and quality of forests and woodlands to meet diverse objectives (timber, wildlife, riparian etc.). Activities during FY99 are shown in Appendix 7. This information will be tracked and used in evaluation of computer modeling projections depicted in the appendix.

Reforestation/re-establishment treatments, *the act of renewing tree cover by establishing young trees naturally or artificially, is done promptly after the previous stand or trees are removed, and is required by policy following regeneration harvest on any of the Land Use Allocations (LUAs).*

The reforestation process includes site preparation, tree planting, seedling production practices to produce desired plants, genetic tree trait conservation, and young stand maintenance (methods of vegetation control and / or protection from animals, insects and disease). Riparian reserves in regeneration sales and green tree retention have reduced the amount of acres harvested or planted. However, the increase in the amount of diverse species other than Douglas-fir was noted. Disease areas (root rot and Swiss needle cast), riparian enhancement projects, and the desire to increase species diversity have played a key role in increasing the amount of Western redcedar, Western hemlock, and a variety of other species planted in Salem-BLM. The use of underplanting in thinnings for research, riparian areas, and other reforestation areas have increased as well. Salem-BLM had an increase in manual site preparation due to the Swiss needle cast epidemic in a narrow strip along the coastal region where there is a growth reduction of Douglas-fir in plantations. There is now a greater emphasis on planting species other than Douglas-fir and the original plan to plant genetically selected Douglas-fir was deferred in the coastal areas affected.

Utilization of genetic seedlings for outplanting is presently limited in availability but will increase in the near future. In FY99, a new plant genetics plan was developed (Edition 1.0, January 1999). The emphasis of development of faster growing and disease resistant timber production forest trees has been modified to gene conservation; that is, maintaining/restoring diversity to at least as high as that of

natural communities. Salem-BLM is a participant in cost-share partnerships with other public and private agencies in second generation tree improvement programs. Seed orchard and progeny testing has been a long term investment by Salem- BLM. Progeny test site measurements and maintenance are done on schedule or as needed. Salem-BLM grew a small amount of native shrub seedlings and collected some native grass seed to meet other objectives in FY99.

Young stand maintenance/protection reflects a sequence of multi-year treatments that are prescribed following periodic monitoring of these lands and are needed to assure successful young stand establishment by providing essentially "free-growing" conditions. There is some increase in maintenance due to active riparian enhancement projects and the Swiss needle cast disease by providing diversity/replacement of current species composition within the young coastal plantations. Protection includes trapping, tubing, and pruning (white pine blister rust control) to ensure conifer survival.

Growth Enhancement Treatments, *reducing stocking (thinning) to concentrate growth on the more desirable trees, attaining desired species composition, developing individual tree attributes (large boles or limbs), or promoting understory vegetation; augmenting nutrient elements (fertilization) to increase growth or overcome nutrient deficiency in the soil; and removing side branches (pruning) to improve timber quality, health, species habitat, or asthetics.*

Stand enhancement treatments are utilized to manage forest stands to maintain species composition, maintain/enhance growth rates, or develop desired structural attributes. Restoration treatments is a term used for creating and maintaining structure, species assemblages, substrate, accumulations of snags and down logs, and reducing landscape risk to insects, diseases, and/or catastrophic fire. Thinning and fertilization of young coastal stands were deferred due to the acceleration of the Swiss needle cast disease and the deleterious effects it has on the trees. Salem-BLM has a small fertilization program which is applied on a periodic basis. Non-coastal areas were fertilized during FY99. A small amount of pruning was applied to upland areas.

Forest surveys (stand exams) were implemented in the matrix and late-successional reserve areas for data collection and analysis of potential future treatments.

20. SPECIAL FOREST PRODUCTS (SFP)

Salem-BLM follows the standards and guidelines set forth in the Oregon/Washington Special Forest Products Procedure Handbook. Each Resource Area established specific guidelines for the management of individual special forest products within their area using an interdisciplinary approach. These guidelines can be found in each Resource Area's NEPA document for SFP. Appendix 8 reflects the SFP sales for FY 1996 through1999. It provides an opportunity to observe fluctuations from year to year, and to identify which products were of most interest during the reporting year.

21. NOXIOUS WEEDS

The objectives this program are to contain and/or reduce noxious weed infestations on BLM-administered lands using an integrated pest management approach and to avoid introducing or spreading noxious weed infestations in any areas. Salem-BLM continues to survey for noxious weed infestations through systematic surveys and during project planning (See Table 11). Infestations are reported to the Oregon Department of Agriculture, and Salem-BLM cooperates with the department to control infestations. Integrated pest management includes chemical, mechanical, manual, and biological methods which are used in accordance with BLM's 1985 Northwest Area Noxious Weed Control Program, Environmental Impact Statement, and 1987 Supplement, and respective Records of

Decision.

Noxious weed risk assessments have been integrated into all project clearance surveys, averaging about 5,800 acres per year over the last five years. The majority of noxious weed sites were found through systematic roadside inventories. Sites that were identified through project planning and inventories have been managed in accordance with the Resource Management Plan. Only eight sites have been identified that needed control efforts. Due to the success of control efforts, only four of those sites needed treatment in FY99.

Table 11 - MANAGEMENT ACTIONS TO CONTROL NOXIOUS WEEDS

Treatment	Species	FY96 thru 98 Acres	FY99 Acres
Manual	Scotch Broom	165	60
	Meadow Knapweed	6	0
	Spotted Knapweed	6	2
	Diffuse Knapweed	1	0
	Gorse	10	0
Biological	Scotch Broom	100s	100s
	Canada Thistle	1500	500
	St.John's Wort	600	200
	Bull Thistle	750	250
	Tansy Ragwort	1000s	1000s

22. WILD FIRE AND FUELS MANAGEMENT

FY99 turned out to be a very mild year for wild fires. Salem-BLM had 15 fires, all of which were human caused. A total of 13.5 acres were burned. Fire prevention, detection, and suppression continues to be handled through the Western Oregon Protection Contract with the Oregon Department of Forestry.

There were no escaped fires during FY99 which required a Wildfire Situation Analysis (WFSA).

Salem-BLM completed all aspects of Phase 1 and 2 fire planning. In FY99, a new fire management plan was completed and signed by the State Director. This plan is expected to be implemented during FY 2000.

Three prescribed burns totaling 89 acres were accomplished during FY99. All areas were successfully treated within the parameters set forth in the approved burn plans. Several of our prescribed fire managers also assisted other agencies in accomplishing their prescribed fire objectives.

23. ACCESS and RIGHTS-OF-WAY

Access, whether acquired by the BLM to cross non-BLM lands or by private landowners to cross BLM

lands, is accomplished through several methods. BLM and numerous private industrial landowners have reciprocal right-of-way agreements, which have existed for many years. These agreements facilitate access through the complex checkerboard ownership pattern of Salem-BLM lands. Other individual rights-of-way are occasionally issued by the BLM for such things as driveways, power lines, and communication sites. Easements are also commonly used to attain BLM access over private property.

During FY99, six reciprocal right-of-way agreements were updated. That brings the total updates since implementation of the RMP (1995-1999) to thirty-six. In addition, during FY99, two individual rights-of-way were issued, for a total of twenty-one since 1995. Salem-BLM lands will continue to be available for rights-of-way when they are consistent with land use planning, local comprehensive plans, and Oregon State laws.

Six new easements were acquired in FY99. Since 1995, 17 easements have been acquired. These easements provide legal access across parcels of non-federal land over roads and trails to BLM administered land and facilities. Easements for recreation, timber management, conservation or scenic protection, and/or other administrative purposes will continue to be acquired where and when needed to support BLM program objectives. Adjustments for reporting easement accomplishments will be made in FY 00. Future Annual Program Summaries will include information on easement acquisitions within Part 26. "Land Tenure Adjustments".

24. ROADS

Seasonal storms in 1999 resulted in $4.6 million dollars in damage to Salem-BLM roads. Application has been made for Federal disaster funding to repair these roads. Ten damaged sites on roads were repaired by force account personnel or Jobs-in-the-Woods contracts. Road maintenance crews accomplished about 500 miles of road maintenance on a total road system of approximately 2,400 miles. Lack of funding forced many of the remaining 1900 miles to be placed in the "not maintained" category.

Contracts allowed Salem-BLM to obliterate or decommission 28.9 miles of road; 22.7 miles of road were "closed" by the installation of gates or other structures.

Nine miles of mainline roads were paved with asphalt. Nine miles of mainline roads were chipsealed. Six major recreational sites were paved. About 1.6 miles of road was constructed. One mile of guardrail was placed on a main line road.

A draft of the Salem District Implementation Strategy for the Western Oregon Transportation Management Plan was reviewed by a interdisciplinary process during FY99. Approval is expected in early FY 2000. In coordination with the Implementation Strategy, the Salem District Transportation Management Objectives were entered in the GIS system which allows companion mapping.

25. ENERGY AND MINERALS

Salem-BLM has had no mineral actions since implementation of the RMP, including FY99.

26. LAND TENURE ADJUSTMENTS

A. Land Exchanges, Land Sales, and Leases

Salem-BLM completed no land exchanges in FY99. Since implementation of the RMP (1995 through 1999), a total of 4,524 acres have been acquired in 7 land exchanges, while 2,240 acres have been conveyed out of Federal ownership by exchange. Refer to Appendix 10 for a summary of completed land exchanges.

Salem-BLM completed two land sales in FY99, conveying 0.53 acres out of Federal ownership by sale. Since 1995, a total of 16 sales have resulted in conveyance of 15.82 acres. These lands were mostly isolated parcels of BLM-administered land targeted for disposal under the RMP. Refer to Appendix 11 for a summary of completed land sales.

No new leases were issued in FY99. Since 1995, three Recreation and Public Purposes (R&PP) leases have been issued.

Future sales, exchanges and purchases will be affected by the H.R. 4326, the "Oregon Public Lands Transfer and Protection Act of 1999". Among the requirements is a policy of "no-net-loss of O&C land, CBWR land, or public domain land" in carrying out sales, purchases, and exchanges in the geographic area which includes the Salem-BLM.

B. Withdrawals

No withdrawals have been initiated since implementation of the RMP. One withdrawal (Power Site Reservation -658) including 16 acres of withdrawn O&C land in Clackamas County, was revoked in FY99. Salem-BLM is reviewing a proposal by the Department of the Army, Corps of Engineers, to approve relinquishment and disposal of 1,321.07 acres of excess lands, including 1,120.08 acres of withdrawn public domain land at Fort Stevens, near the mouth of the Columbia River, in Clatsop County.

27. HAZARDOUS MATERIALS

Since 1995, twenty-one abandoned waste sites on Salem-BLM lands have been identified. Seventeen of the twenty-one were determined to be hazardous and cleaned up. Abandoned hazardous wastes removed from federal lands included; drug lab waste, abandoned barrels of acids and heavy metals, dynamite, oil based paints, pesticides, and used paint thinners and solvents.

All existing underground fuel storage tanks at the district and field offices have been removed and where needed, replaced with approved above ground storage tanks. Official no further action letters were received for four tanks from the Oregon Department of Environmental Quality (ODEQ) and two more are still under review. The two leaking underground storage tanks removed from BLM's Willamina Road Maintenance Shop, which had an assessment report submitted to ODEQ, are included in the four no further action letters received.

Salem-BLM participated in a voluntary assessment known as a *Compliance Assessment - Safety, Health, and the Environment* (CASHE) in March of 1997. The CASHE assessment process was developed to assist BLM managers identify environmental compliance issues that may exist at their facilities, and determine how to correct them. Salem-BLM had 125 findings which needed correction as a result of the assessment. At the end of FY99, only four findings remain unresolved, and all the remaining findings are progressing toward resolution.

28. COORDINATION AND CONSULTATION

A. Federal Agencies

From 1995 through 1999, significant increases in cooperation and coordination between federal agencies has been accomplished. Province Advisory Councils (PACs), organized in accordance with the Northwest Forest Plan include the following federal agencies: Bureau of Land Management, Forest Service, Bureau of Indian Affairs, Fish & Wildlife Service, Environmental Protection Agency, National Marine Fishery Service, and Natural Resource Conservation Service. In addition, personnel from several of these agencies have been involved in project level planning, conflict resolution, Endangered Species Act consultation, and implementation monitoring. This was continued by Salem-BLM in FY99.

B. State of Oregon

In FY99, Salem-BLM continued its long term working relationships with Oregon Department of Forestry, Oregon Department of Fish and Wildlife, and Oregon Department Environmental Quality. These relationships cover a diverse assortment of activities from timber sale planning to fish habitat inventory, from water quality monitoring to hazardous material cleanup, and air quality maintenance to wildfire suppression.

C. Counties

Salem-BLM administers land in 13 separate counties. While involvement levels vary between counties based on amount of BLM lands, there is frequent mail and telephone contact with various county commissioners and other staff. These involve BLM proposed projects, county projects which may affect BLM lands, water quality, and other issues. County commissioners receive copies of all major publications, project updates, and project proposals. This cooperation was continued in FY99.

D. Cities

Salem-BLM has had increasing involvement with various city governments. The involvement carried on in 1999 related to timber harvest and road building regarding the effect on city drinking water.

E. Tribes

Coordination with Native American groups has broadened as a result of the NWFP. Several Tribes are represented on the Coast Range Province Advisory Committee, where they participate with other interests in providing advice on activities within the province. Tribal notification was made for FY 95-99 projects as appropriate.

F. Watershed Councils

In FY99, Salem-BLM continued to participate and support local watershed councils (WC). This increased exchanges among all interested stakeholders of local watersheds about the activities proposed or occurring therein. Table 12 shows the current status of Salem-BLM involvement in local watershed councils.

G. Third Year Evaluation - The third year evaluation of the Salem Resource Management Plan has nearly been completed by Oregon State Office-BLM. The evaluations for each of the six western Oregon RMPs will be available this summer. An executive summary describing the overall process and conclusions will be mailed to all persons or groups who are on the mailing list for this Annual Program Summary. The individual evaluations will be available, free of charge, upon request, and also accessible "on-line" at the Salem-BLM web site ((http://www.or.blm.gov/salem) The purpose of the evaluation is to determine whether there is significant cause for an amendment or a revision to the plan. This is done by evaluating cumulative monitoring results and accomplishments, determining if the plan's goals or objectives are being met, determining whether goals and objectives were realistic and achievable in the first place and whether changed circumstances or new information have altered activities or expected impacts.

Table 12 - SALEM-BLM INVOLVEMENT WITH LOCAL WATERSHED COUNCILS

Watershed Council	Resource Area	Status of Involvement 1999
North Santiam	Cascades	Attend monthly meetings, technical advisory role with in-kind support and Jobs-in-the-Woods funds.
Clackamas River Basin	Cascades	Attend some meetings. Member of the executive board.
Lower Columbia River	Tillamook	Not involved at this time.
Lower Nehalem	Tillamook	Not actively involved at this time. Occasional meetings with members.
Marys River	Marys Peak	Attend monthly council meetings. Member of the council.
Mid-Coast	Marys Peak	Attend council meetings and technical committee meetings. BLM not a member of the council. Helped fund a watershed analysis for Rock Creek subwatershed.
Nestucca/Neskowin	Tillamook	Attend monthly council meetings and technical committee meetings. BLM not a member of the board. The council reviews BLM projects. Participate in water quality monitoring partnership.
Rickreall	Marys Peak	Attend monthly council meetings. Member of the council.
S.Santiam	Cascades	Attend most monthly council meetings. Member of the council. Participate in water quality monitoring partnership.
Sandy Basin	Cascades	Attend some monthly council meetings. Member of the council.
Tualatin	Tillamook	Attend monthly council meetings. Not a member of the council. Working on a joint watershed assessment for mid-Tualatin.
Upper Nehalem	Tillamook	Attend some meetings and provide technical support. Working on joint project planning.
Yamhill Basin	Tillamook Marys Peak	Attend meetings. The council participates in BLM Adaptive Management Area (AMA) planning and reviews BLM projects. BLM member of council. Participate in water quality monitoring partnership.
Scappoose Bay	Tillamook	Attend meetings. Council involved in BLM project review. Working on joint restoration projects.
Tillamook Bay	Tillamook	Member of the council. Attend monthly meetings and provide technical support.
Pudding River	Cascades	Attend monthly meetings. Technical advisory role only.
Siletz	Marys Peak	Attend monthly meetings. Advisory only
Pedee / Ritner Creek	Marys Peak	Attend monthly meetings. Advisory only
Alsea	Marys Peak	Attend some monthly meetings.

H. National Environmental Policy Act (NEPA) Documents
A log book of all NEPA documents prepared by Salem-BLM is maintained at the public service desk. In addition, the quarterly project update publishes the availability of specific environmental documents and their stage of preparation. This is a vital part of scoping and public comment policy for all projects. Individual project NEPA documents are also advertized in local newspapers when public review periods are opened. Increasingly, NEPA information is being put on the Salem-BLM's WEB site.

I. Survey and Mange EIS - The *Draft Supplemental Environmental Impact Statement for Amendment to the Survey and Manage, Protection Buffer, and Other Mitigating Measures Standards and Guidelines* was released for public comment in December 1999. The DEIS comment period closed March 3, 2000. The final EIS is expected to be available in the early summer and the Record of Decision may amend portions of the Salem-BLM RMP.

J. Internet
Salem-BLM established an internet web site (http://www.or.blm.gov/salem). In FY 99, numerous documents and information was made available to the public through this mechanism. Planning and environmental documents, recreation information, maps, directories and numerous other informative items maintain communication between Salem-BLM and the public.

29. RESEARCH AND EDUCATION

A. Research
Salem-BLM has a long-term relationship with the research community centered at Oregon State University (OSU) in Corvallis. Cooperative research is conducted by various departments of OSU, the Pacific Northwest Research Station, the Forest and Rangeland Ecosystem Science Center (FRESC) of the U. S. Geological Survey, Biological Resources Division (BRD); and other federal agencies. The BRD was formed when USDI consolidated its research personnel into one agency. Together with the BLM and other USDI agencies, the BRD conducts an annual evaluation of ongoing and proposed research projects, choosing the ones to fund in the context of current and future research needs; each westside BLM District has a representative at these periodic meetings. Projects relating to the ongoing implementation of the Northwest Forest Plan (NFP) have consistently done well in securing funds through this process.

The Cooperative Forest Ecosystem Research (CFER) program was initiated in June 1995. Cooperators include the BLM, FRESC, OSU - Colleges of Forestry and Agricultural Sciences, and the State of Oregon - Department of Forestry (ODF). The intent of the program is to facilitate ecosystem management in the Pacific Northwest, with emphasis on meeting priority research information needs of the BLM and ODF. The research problem analysis in support of the CFER program was produced in June 1997, and identified three areas where research is needed to support implementation of the NFP: 1), the ecology and management of biodiversity of young forests; 2), the ecology and management of riparian zones; and 3), the ecology and management of special interest species. By 1999, these areas of interest led to the development of three integrated projects: 1), biotic responses to changes in stand structure; 2), production and function of large wood in the riparian zone; and 3), effects of landscape pattern and composition on species.

Two good sources of current information on the CFER program are the CFER Annual Report for 1999, and the CFER web site at: www.fsl.orst.edu/cfer. The annual report lists twenty-two ongoing research projects in western Oregon, and the Salem District has study sites for six of them: 1), density management studies; 2), the influence of thinning on the growth and survival of understory shrubs and trees in young conifer forests; 3), old-growth stand development; 4), monitoring avian response to density management; 5), effects of beaver on plant diversity; and 6), the effects of landscape patterns on fish distribution. Taken together, these CFER projects will significantly aid the BLM in meeting the

requirements for both effectiveness and validation monitoring identified in the NWFP.

B. Education Opportunities

Several key outdoor education programs continued to be implemented during FY99 in Salem-BLM. Programs are operated cooperatively with non-profit educational organizations, schools, colleges, and other organized groups. One of the most successful cooperative partnerships is the science-based and award-winning Cascade Streamwatch program operated at the Wildwood Recreation Site along the Salmon Wild and Scenic River. More than 8,000 students have participated in the program operated in coordination with BLM's partners, Wolftree, Inc and the Forest Service, since 1994. Other partners utilize the BLM's Larch Mountain Environmental Education Site, Sandy River ACEC, Wilhoit Springs ACEC, Yaquina Head, and numerous other locations. Programs include college research (Oregon State University, University of Oregon, and Reed College), school environmental education field activities, and site monitoring programs. Several special events for the general public are conducted in cooperation with several partners. These include the Salmon Festival (Sandy River) and the Song Bird Festival (Salmon River). Over 15,000 participants normally attend these events. In FY99, outdoor education programs were presented in classrooms, outdoor school events, and other school based activities to over 2500 students ranging from first grade through college level.

30. INFORMATION RESOURCE MANAGEMENT

The ability to accomplish very complex management of diverse resources requires the ability to access large amounts of data and to apply complicated processing to that data. The goal of Salem-BLM is to provide its professionals access to that data and the tools needed to process it.

BLM in western Oregon made a substantial investment in building a Geographic Information System (GIS) as it developed Resource Management Plans (RMPs). This information system has allowed the BLM to organize and standardize basic resource data across the western Oregon districts. GIS has now become a daily tool in resource management that allows display and analysis of complex resource issues in an efficient manner. Salem-BLM is actively updating and enhancing resource data as conditions change and further field information is gathered.

In FY99, Salem-BLM continued to gather data needed to perform required analyses. It has continued to maintain current data in existing databases while also seeking to gather new data. The biggest workload in new data collection has been densification of a hydrology GIS theme, which continued through FY99 and will continue for several more years. This work is important to more accurately determine the location of streams and other water sources.

31. CADASTRAL SURVEY

Cadastral survey is an essential function in accomplishment of resource management plan objectives. In Salem-BLM, between October 1995 and September 1999, cadastral survey crews completed 45 projects with a total of 227 square miles of resurvey (FY96 thru 98: 162 miles; FY99: 65 miles). During these resurveys, 257 (54 in FY99) monuments were established and over 130 miles of federal boundaries were marked. These surveys established property lines to facilitate preparation of timber sales and land
disposal / exchanges. Many surveys were done on a cost share basis with adjacent landowners. Cooperators such as timber companies contributed about $333,000 back to the government during this period.

In addition to normal survey work, technical expertise in geographic positioning system (GPS)

technology was provided for botany and biology mapping, recreation hiking trail mapping, and geographic information system (GIS) land line inventory applications.

Other accomplishments included resolving water rights issues and answering 231 inquiries of surveying information for private land surveyors and local landowners in FY99.

32. LAW ENFORCEMENT

Salem-BLM's law enforcement program has evolved dramatically since the implementation of the RMP This federal law enforcement program addresses the public safety and resource protection issues which accompany management responsibilities under the RMP. Primary to the program are the federal law enforcement rangers assigned to Salem-BLM. Salem-BLM also has contracts with several county sheriff's departments for extra enforcement efforts in special problem areas. During 1999, significant preparation was undertaken for implementation of a national center of excellence located at the Salem office, with training for new Law Enforcement personnel through the Student Cooperative Education Program (SCEP).

Salem-BLM rangers responded to a variety of incidents, including theft of special forest products, habitat and resource damage, trash dumping, controlled substance crimes, destruction of federal facilities, and disorderly conduct. During 1999, over 193 incidents of these types were reported on public lands administered by Salem-BLM.

RESOURCE MANAGEMENT PLAN MAINTENANCE (RMP) - 1999

The Salem District Resource Management Plan and Record of Decision (ROD/RMP) was approved in May 1995. Since then, Salem-BLM has been implementing the plan across the entire spectrum of resources and land use allocations. As the plan is implemented, it has become necessary to make minor changes, refinements, or clarifications of the plan. These actions are called "plan maintenance". They do not result in expansion of the scope of resource uses or restrictions or changes in the terms, conditions, and decisions of the approved ROD/RMP. Plan maintenance does not require environmental analysis, formal public involvement, or interagency coordination. Certain plan maintenance was published in the FY96 - 98 Annual Program Summaries. The following FY99 minor changes, refinements, and clarifications have been implemented as part of plan maintenance for the Salem-BLM RMP.

CLARIFICATION FROM OREGON STATE OFFICE-BLM AND THE REGIONAL ECOSYSTEM OFFICE

Interim Guidance and Survey Protocols for Survey and Manage Species
Additional final protocols were issued during FY99 for several "Survey and Manage" species. These protocols are adopted in their entirety as RMP clarification.

Survey Delays for Seven Survey and Manage Species
In March, the State Director of Oregon / Washington Bureau of Land Management made a decision on plan maintenance for Resource Management Plans of the Salem, Eugene, Roseburg, Coos Bay, and Medford Districts, and the Klamath Falls Resource Area of the Lakeview District. The plan maintenance delays survey requirements for seven "Survey and Manage" and "Protection Buffer" fungi species for which surveys remain infeasible.

This plan maintenance decision extends the environmental assessment published in October 1998 (Environmental Assessment to Change the Implementation Schedule for Survey and Manage and Protection Buffer Species) and a Finding of No Significant Impact (FONSI) published on February 26, 1999. Agency staff found that the information in the environmental assessment and FONSI are still valid and prepared findings and a plan maintenance document to this effect. The supporting findings and plan maintenance documents are filed with the official Salem copy of the RMP.

A copy of the Decision Notice and Finding of No Significant Impact is also available upon request from Cheryl McCaffrey, Bureau of Land Management, P.O.Box 2965, Portland, Oregon 97208, phone 503-952-6050

CLARIFICATION DEVELOPED WITHIN SALEM-BLM

Off-Highway Vehicle (OHV) Designations - Cascades Resource Area

BLM-administered lands in the Cascades Resource Area (RA) lie within Clackamas, Multnomah, Marion, and Linn Counties in northwest Oregon. The Salem District Resource Management Plan (RMP, May 1995) allocated acres in each of the three major off-highway vehicle designations (Closed, Limited, or Open) and indicated that these designations would be mapped at a later date (RMP, page 42). In general, areas and acres of land with unique and sensitive resource values were designated in the RMP as "Closed" to use by OHV's. Acres where OHV's could be used with certain restrictions, were listed as "Limited." Remaining acres were listed as "Open."

OHV Designation Definitions:

Open: All types of off-highway vehicle use is permitted at all times, anywhere in the open area, subject to the operation regulations and vehicle standards set forth in federal regulations (43 CFR 8341 and 8343). These pertain to the operation of off-highway vehicles in a manner that promotes safety and resource protection. These regulations also stipulate that, on all public lands, site specific areas identified as receiving severe resource damage can be closed or regulated administratively as the need arises.

Limited: Off-highway vehicle use may be restricted at certain times, in certain areas, and/or to certain vehicular use. Restrictions may be of any type, but can generally be accommodated within the following type of categories: Numbers of vehicles; types of vehicles; time or season of vehicle use; permitted or licensed use only; use on existing roads and trails; use on designated roads and trails; and other restrictions. These restrictions are determined on a site specific basis.

Closed: Off-highway vehicle use is prohibited. Use of off-highway vehicles in closed areas may be allowed for certain reasons; however, such use shall be made only with the approval of the authorized officer. Other exceptions are listed in 43 CFR 8340.

OHV Designation Adjustments:

Open and Limited Designations: Existing OHV categories for special areas (RMP, page 34 and 35) and other sites/areas (RMP, page 45) were used to complete the initial mapping of OHV designations for BLM-administered lands in the Cascades Resource Area. Riparian reserves were listed as "limited" in the RMP and when mapped, they significantly fragmented all potential "open" areas to the extent that on-the-ground OHV use in these areas would generally be limited to roads. This plan maintenance would shift these fragmented "open" acres outside riparian reserves to a "limited" designation, to more accurately represent OHV use currently allowed by the RMP. Approximately 87,300 acres of BLM-administered lands would be designated as "limited to existing roads and designated trails" and 70,700 acres to "limited to designated roads" (see Cascades Resource Area OHV Designations Map).

Closed Designations: Approximately 11,010 acres are "closed" to OHV use (see Cascades Resource Area OHV Designations Map). These areas include: Carolyn's Crown ACEC/RNA, 261 acres; Larch Mountain Environmental Education Site, 183 acres; Middle Santiam ACEC/ONA, 108 acres; North Santiam ACEC, 31 acres; Sandy River Gorge ACEC/RNA, 400 acres; Soosap Meadows ACEC, 343 acres; Molalla Non-Motorized Shared-Use Trail System, 2,634 acres; White Rock Fen ACEC, 51 acres; Wilhoit Springs ACEC, 170 acres; Willamette River ACEC, 76 acres; Williams Lake ACEC, 98 acres; and Table Rock Wilderness, 6,350 acres. There are also 36 progeny test sites totaling 305 acres that are closed to OHV use. Due to resource damage associated with motorized vehicle use, Wilhoit Springs ACEC and Williams Lake ACEC has been shifted from a "limited" designation to a "closed" designation (43 CFR 8341.2).

Notice of the above OHV designations for Cascades Resource Area were published in the Federal Register (64 FR 23097) on April 29, 1999. No comments or requests for further information were received on the notice.

MONITORING

Salem-BLM Implementation Monitoring

Implementation monitoring was based on a process developed by Salem-BLM. The original basis was Appendix J of the ROD/RMP, but questions from the interagency monitoring effort were also incorporated or used to clarify issues of concern during FY 96. Each year, FY97 through FY99, Salem-BLM revised and improved the questions to facilitate monitoring. For FY99, three monitoring teams, one to monitor each resource area, were again identified. The teams consisted of core team members, resource area representatives, and operations support team members. The monitoring teams selected projects for monitoring and prepared individual resource area reports based on the evaluation of the results. Detailed information on the monitoring process is available for review in the Salem-BLM Office. A summary of the FY99 monitoring results follows this general monitoring discussion. For FY99, the pool used to select monitoring units was changed to include projects completed between June 30 of one year and June 30 of the following year. This was done to facilitate the timing of monitoring and having a sufficient pool each year of completed projects. As a result of this one time change, the pool for FY99 only covered 9 months of projects, a much smaller pool than normal.

Province Level Implementation Monitoring

Two separate teams, one to monitor the Willamette Province and one to monitor the Coast Range Province, were selected to complete the fourth year of province level implementation monitoring. There were federal agency representatives and community members on the teams. The teams responded to 90 questions on randomly selected timber sales and 41 questions on randomly selected fifth-field watersheds. Within Salem-BLM, one timber sale (Reese Creek Commercial) and one watershed (Marys River) were monitored in the Willamette Province, and none in the Coast Range Province. Specific results will be available from the Regional Ecosystem Office later this year, or individual reports may be reviewed at the Salem-BLM Office.

Effectiveness Monitoring

Effectiveness monitoring is a longer range program than implementation monitoring, and time must pass to measure many of the factors of concern. Salem-BLM made no further progress during FY99 in continuing development of a district level effectiveness monitoring program. However, there are some effectiveness monitoring efforts which have be ongoing for some time, which are discussed below.

FY1999 represents the seventh and final year of BMP effectiveness monitoring on the McCully Mountain timber sale in the Cascade Resource Area. This paired watershed study included monitoring for changes in stream flow, sediment, and temperature. Harvest and road activities concluded and implementation of BMP's occurred in 1997. Data analysis and initial reporting is yet to be done. Water temperature monitoring also continued on sites throughout Salem-BLM as part of 303d monitoring.

FY99 IMPLEMENTATION MONITORING SUMMARY REPORT
SALEM-BLM

Introduction:

There are three types of monitoring required under the Northwest Forest Plan (NWFP) and the Salem-BLM Resource Management Plan (RMP); implementation, effectiveness, and validation monitoring. Implementation monitoring determines if standards and guidelines are being followed, generally by evaluation of selected projects to determine if they were consistent with direction in the management plan. Effectiveness monitoring is a longer term view, evaluating whether application of the management plan achieved the desired goals, or if the objectives of the standards and guidelines were met. Validation monitoring determines if underlying management assumptions used in the plan were correct. Effectiveness and validation monitoring are more research oriented and are long term projects.

This report is limited to implementation monitoring of projects on Salem-BLM which were completed in during the period from October 1, 1998 to June 30, 1999. Since the pool of available units was based on an nine month period rather than a full year, the number of units monitored was fairly low compared to previous years. This situation will be corrected for FY00 monitoring when the pool of available units will return to a 12 month window for project completion.

To put the results of the FY99 implementation monitoring into perspective, each of the nine selected project units was evaluated against 66 questions. There was a total of 594 individual responses, of which 569 (96%) were favorable. Only 23 (4%) were "No" or "Does Not Meet" (See appendix 16).

Following is a list of the questions which had either a "No" or a "Does Not Meet" response. They are listed in two groups: Documentation Deficiencies and Implementation Errors. The ratings are primarily tools to help monitoring teams identify areas that need improvement and are not necessarily an accurate reflection of overall status. For example, a "Does Not Meet" rating could result if documentation was lacking in sufficient detail for the team to make an assessment. This may or may not be reflected on the ground in terms of biologic effect. No response stands alone, but must be considered with the remarks made by the team and their context. This information is found in project reports in the district and resource area offices.

Documentation Deficiencies:

Salem-BLM added numerous documentation requirements to the implementation monitoring questions. This was done to assure that all issues were evaluated and to help complete monitoring more efficiently. Thus, this group of responses is more of a "pulse check" on improving documentation. It is important to note that they are not violations of NEPA, but deficiencies in documenting supporting evidence for decisions.

Hull Park Salvage did not address coarse woody debis (CWD) concerns from the watershed analysis in the NEPA documentation. (Q2) Area utilized a categorical exclusion (CX) for this small operation which did not have adequate discussion on CWD issues.

Hull Park Salvage did not adequately identify stream locations in the documentation and project planning or address whether in or out of riparian reserves. (Q3, Q4, Q5, Q7)
Area utilized a categorical exclusion (CX) for this small operation which did not have adequate discussion on riparian issues or stream locations. No LUA discussions of any type included in CX.

Salmon River Fish Restoration project identified streams in the project area, riparian reserve issues, and how the project met ACS objectives, but forgot to identify those items in the log source area (a different location). (Q3, Q4, Q5, Q6). This was mainly an oversight of dealing with the location where trees were obtained to use in the fish project while preparing the documentation.

Salmon River Fish Restoration failed to identify unmapped LSRs in the log source area. (Q23)

Two projects did not identify all of the potentially affected beneficial uses in the EA.(Q36). The Williams Creek road restoration project and the Reese Creek timber sale did not specifically identify beneficial uses, as such, in the documentation. Some of them were dealt with individually. The effects were likely insignificant, but if other important beneficial uses were missed, effects might have been potentially more serious.

Cascades Fertalization project documentation, while noting presence of owls, did not identify their locations. (Q23)

IMPLEMENTATION ERRORS:

The Good Gawley Timber Sale failed to identify the full extent of one stream in the project area resulting in insufficient riparian reserves in a small stretch of stream. Other streams were correctly identified and treated accordingly in the documentation and the project. (Q3, Q4)

The Good Gawley Timber Sale had some riparian reserve that received thinning treatment (<1 Acre), inconsistent with the decision to stay out of riparian reserves. (Q7, Q38)

The Nestucca Road Obliteration project failed to remove some culverts which was inconsistent with the decision. (Q7, Q38, Q46). Although attempted in the summer of 1998, the Tillamook Resource Area (RA) was not successful at securing a contractor for this project until September 11, 1998 and work did not begin until after September 30th. The RA made a conscious decision not to remove five culverts on two of the twelve roads decommissioned because the RA's soil and water resource specialist determined that the removal of the culverts would result in greater resource impacts given the time of year the work was being performed than leaving them in place since the culverts were in "good condition and not likely to fail in the future."

Cascade Fertilization project failed to identify locations of all intermittent streams, resulting in missing identification of some riparian buffers and treatment over live streams in some areas. (Q4, Q51a)

Cascades Fertilization project failed to comply with BMP#7 which dealt with project timing and rain events, resulting in application of fertilizer when there was overland flow and increased potential for stream contamination. (Q38)

Salem District
FY99 Annual Program Summary
APPENDICES

Glossary

Acronyms

Appendix 1 . . . . . Harvest Volumes - Annual Projections vs. Offered FY 95-99

Appendix 2 . . . . . Acres Cut by Age Class (1995-1999) - Bar Chart

Appendix 3 . . . . . Regeneration Harvest Volume - A Decadal Perspective

Appendix 4 . . . . . Thinning / Density Mgt. Harvest Volume - A Decadal Perspective

Appendix 5 . . . . . Regeneration Harvest Acres - A Decadal Perspective

Appendix 6 . . . . . Thinning / Density Mgt. Harvest Acres - A Decadal Perspective

Appendix 7 . . . . . Comparison of Intensive Silviculture Practices - Model Projections vs. Actual

~~Appendix 8 . . . . . Deleted for FY99 APS~~

Appendix 9 . . . . . Salem District Summary of Special Forest / Natural Product Actions

Appendix 10 . . . . . Lands and Realty Activity FY95-99 (Exchanges)

Appendix 11 . . . . . Lands and Realty Activity FY95-99 (Land Sales)

Appendix 12 . . . . Salem District FY95-99 Summary of Watershed Restoration Projects

Appendix 13 . . . . . Summary of Numbers and Types of Project Units Monitored FY99

Appendix 14 . . . . . FY99 Implementation Monitoring Selection Categories

~~Appendix 15 . . . . . Deleted for FY99 APS~~

Appendix 16 . . . . . Response Frequencies and Distribution by Selected Units - "No or Did Not Meet"

Appendix 17 . . . . . Resident Labor Force, Employment by Industry, Oregon

Appendix 18 . . . . . Resident Labor Force, Employment by Industry, Benton County

Appendix 19 ..... Resident Labor Force, Employment by Industry, Clatsop County

Appendix 20 ..... Resident Labor Force, Employment by Industry, Columbia County

Appendix 21 ..... Resident Labor Force, Employment by Industry, Lincoln County

Appendix 22 ..... Resident Labor Force, Employment by Industry, Linn County

Appendix 23 ..... Resident Labor Force, Employment by Industry, Tillamook County

Appendix 24 ..... Resident Labor Force, Employment by Industry, Salem Metropolitan Area (Polk and Marion Counties)

Appendix 25 ..... Resident Labor Force, Employment by Industry, Portland Metropolitan Statistical Area (Clackamas, Multnomah, Washington, Yamhill Counties)

Glossary

AMA - Adaptive Management Area - The Salem District's Northern Coast AMA is managed to restore and maintain late-successional forest habitat while developing and testing new management approaches to achieve the desired economic and other social objectives.

Allowable Sale Quantity (ASQ) - An estimate of annual average timber sale volume likely to be achieved from lands allocated to planned, sustainable harvest.

Anadromous Fish - Fish that are hatched and reared in freshwater, move to the ocean to grow and mature, and return to freshwater to reproduce. Salmon, steelhead, and shad are examples.

Archaeological Site - A geographic locale that contains the material remains of prehistoric and/or historic human activity.

Area of Critical Environmental Concern (ACEC) - An area of BLM administered lands where special management attention is needed to protect and prevent irreparable damage to important historic, cultural or scenic values, fish and wildlife resources, or other natural systems or processes; or to protect life and provide safety from natural hazards.

Best Management Practices (BMP) - Methods, measures, or practices designed to prevent or reduce water pollution. Not limited to structural and nonstructural controls and procedures for operations and maintenance. Usually, BMPs are applied as a system of practices rather than a single practice.

Biological Diversity - The variety of life and its processes, including a complexity of species, communities, gene pools, and ecological function.

Candidate Species - Plant and animal taxa considered for possible addition to the List of Endangered and Threatened Species. These are taxa for which the Fish and Wildlife Service has on file sufficient information on biological vulnerability and threat(s) to support issuance of a proposal to list, but issuance of a proposed rule is currently precluded by higher priority listing actions.

Cavity Nesters - Wildlife species, most frequently birds, that require cavities (holes) in trees for nesting and reproduction.

Commercial Thinning - The removal of merchantable trees from a stand to encourage growth of the remaining trees.

Connectivity - The Connectivity / Diversity lands are specific blocks spaced throughout the matrix lands, which have similar goals as matrix but have specific Standards & Guidelines which affect their timber production. They are managed on longer rotations

(150 years), retain more green trees following regeneration harvest (12-18) and must maintain 25-30 percent of the block in late successional forest.

Cubic Foot - A unit of solid wood, one foot square and one foot thick.

Cumulative Effect - The impact that results from identified actions when they are added to other past, present, and reasonably foreseeable future actions regardless of who undertakes such other actions. Cumulative effects can result from individually minor but collectively significant actions taking place over a period of time.

Density Management - Cutting of trees for the primary purpose of widening their spacing so that growth of remaining trees can be accelerated. Density management harvest can also be used to improve forest health, to open the forest canopy, or to accelerate the attainment of old growth characteristics, if maintenance or restoration of biological diversity is the objective.

District Designated Reserves (DDR) - Areas designated for the protection of specific resources, flora and fauna, and other values. These areas are not included in other land use allocations nor in the calculation of the ASQ.

Eligible River - A river or river segment, through an interdisciplinary team process and in some cases interagency review, found to meet Wild and Scenic River Act criteria of being free flowing and possessing one or more Outstandingly Remarkable Values.

Endangered Species - Any species defined through the Endangered Species Act as being in danger of extinction throughout all or a significant portion of its range and published in the Federal Register.

Environmental Assessment (EA) - A systematic analysis of site-specific BLM activities used to determine whether such activities have a significant effect on the quality of the human environment; and whether a formal Environmental Impact Statement is required; and to aid an agency's compliance with NEPA when no EIS is necessary.

General Forest Management Area (GFMA) (See Matrix) - This is the federal land not encumbered by any other land use designation, on which most timber harvest and silvicultural activities will be conducted.

Harvested Volume or Harvested Acres - Refers to timber sales where trees are cut and taken to a mill during the fiscal year. Typically, this volume was sold over several years. This is more indicative of actual support of local economies during a given year.

Hazardous Materials - Anything that poses a substantive present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of or otherwise managed.

Land Use Allocation (LUA) - Allocations which define allowable uses / activities,

restricted uses / activities and prohibited uses / activities. Each allocation is associated with a specific management objective. Those discussed below include Matrix (or GFMA), Connectivity, LSR, and AMA.

Late-Successional Forests - Forest seral stages that include mature and old growth age classes.

LSR - Late Successional Reserve - Lands which are managed to protect and enhance old-growth forest conditions.

Matrix Lands - Federal land outside of reserves and special management areas that will be available for timber harvest at varying levels.

MMBF - Abbreviation for million board feet of timber.

Noxious Plant/Weed - A plant specified by law as being especially undesirable, troublesome, and difficult to control.

O&C Lands - Public lands granted to the Oregon and California Railroad Company, and subsequently revested to the United States, that are managed by the Bureau of Land Management under the authority of the O&C Lands Act.

Offered (sold) Volume or Offered (sold) Acres - Any timber sold during the year by auction or negotiated sales, including modifications to contracts. This is more of a "pulse" check on the district's success in meeting ASQ goals than it is a socioeconomic indicator, since the volume can get to market over a period of several years. It should be noted that for this Annual Program Summary we are considering "offered" the same as "sold". Occasionally sales do not sell. They may be reworked and sold later or dropped from the timber sale program. Those sold later will be picked up in the APS tracking process for the year sold. Those dropped will not be tracked in the APS.

Off-Highway Vehicle (OHV) - Any motorized track or wheeled vehicle designed for cross-country travel over natural terrain. The term, "Off Highway Vehicle" will be used in place of the term "Off Road Vehicle" to comply with the purposes of Executive Orders 11644 and 11989. The definition for both terms is the same.

> **Open:** Designated areas and trails where Off Highway Vehicles may be operated subject to operating regulations and vehicle standards set forth in BLM Manuals 8341 and 8343.
>
> **Limited:** Designated areas and trails where Off Highway Vehicles are subject to restrictions limiting the number or types of vehicles, date, and time of use; limited to existing or designated roads and trails.
>
> **Closed:** Areas and trails where the use of Off Highway Vehicles is permanently or temporarily prohibited. Emergency use is allowed.

Outstanding Natural Area (ONA) - An area that contains unusual natural characteristics and is managed primarily for educational and recreational purposes.

Outstandingly Remarkable Values (ORV) - Values among those listed in Section 1 (b) of the Wild and Scenic Rivers Act: "scenic, recreational, geological, fish and wildlife, historical, cultural, or other similar values . . ." Other similar values that may be considered include ecological, biological or botanical, paleontological, hydrological, scientific, or research.

Precommercial Thinning - The practice of removing some of the trees less than merchantable size from a stand so that remaining trees will grow faster.

Prescribed Fire - A fire burning under specified conditions that will accomplish certain planned objectives.

Probable Sale Quantity (PSQ) - An estimated volume that can be harvested from matrix and AMA lands based on certain computer modeling assumptions.

> **"Projected Acres"** are displayed by modeled age class for the decade. These "modeled" age class acres are estimates derived from modeling various silvicultural prescriptions for regeneration, commercial thinning, and density management harvest. Modeled age class acre projections may or may not correspond to "Offered" or "Harvested" age class acres at this point in the decade. Additional age classes are scheduled for regeneration, commercial thinning, and density management harvest at other points in the decade.

Regeneration Harvest - Timber harvest conducted with the partial objective of opening a forest stand to the point where favored tree species will be reestablished.

Regional Ecosystem Office (REO) - The main function of this office is to provide staff work and support to the Regional Interagency Executive Committee (RIEC) so the standards and guidelines in the forest management plan can be successfully implemented.

Regional Interagency Executive Committee (RIEC) - This group serves as the senior regional entity to assure the prompt, coordinated, and successful implementation of the forest management plan standards and guidelines at the regional level.

Research Natural Area (RNA) - An area that contains natural resource values of scientific interest and is managed primarily for research and educational purposes.

Resource Management Plan (RMP) - A general land use plan prepared by BLM under current regulations in accordance with the Federal Land Policy and Management Act.

Right-of-Way - A permit or an easement that authorizes the use of public lands for specified purposes, such as pipelines, roads, telephone lines, electric lines, reservoirs,

and the lands covered by such an easement or permit.

Rural Interface Areas - Areas where BLM administered lands are adjacent to or intermingled with privately owned lands zoned for 1 to 20-acre lots or that already have residential development.

Seral Stages - The series of relatively transitory plant communities that develop during ecological succession from bare ground to the climax stage. There are five stages:

> **Early Seral Stage:** The period from disturbance to crown closure of conifer stands usually occurring from 0-15 years. Shrubs, grasses, and forbs, are plentiful.
>
> **Mid Seral Stage:** The period in the life of a forest stand from crown closure to ages 15-40. Due to stand density, shrubs, grasses, or forbs rapidly decrease in the stand. Hiding cover may be present.
>
> **Late Seral Stage:** The period in the life of a forest stand from first merchantability to culmination of Mean Annual Increment. This is under a regime including commercial thinning, or to 100 years of age, depending on wildlife habitat needs. During this period, stand diversity is minimal, except that conifer mortality rates will be fairly rapid. Hiding and thermal cover may be present. Forage is minimal.
>
> **Mature Seral Stage:** The period in the life of a forest stand from Culmination of Mean Annual Increment to an old growth stage or to 200 years. This is a time of gradually increasing stand diversity. Hiding cover, thermal cover, and some forage may be present.
>
> **Old Growth:** This stage constitutes the potential plant community capable of existing on a site given the frequency of natural disturbance events. For forest communities, this stage exists from approximately age 200 until when stand replacement occurs and secondary succession begins again. Depending on fire frequency and intensity, old growth forests may have different structures, species composition, and age distributions. In forests with longer periods between natural disturbance, the forest structure will be more even-aged at late mature or early old growth stages.

Silvicultural Prescription - A detailed plan, usually written by a forest silviculturist, for controlling the establishment, composition, constitution, and growth of forest stands.

Site Preparation - Any action taken in conjunction with a reforestation effort (natural or artificial) to create an environment that is favorable for survival of suitable trees during the first growing season. This environment can be created by altering ground cover, soil or microsite conditions, using biological, mechanical, or manual clearing, prescribed burns, herbicides, or a combination of methods.

SEIS Special Attention Species - A term which incorporates the "Survey and Manage" and "Protection Buffer" species from the Northwest Forest Plan. (RMP30)

Special Status Species - Plant or animal species in any of the following categories

* Threatened or Endangered Species
* Proposed Threatened or Endangered Species
* Candidate Species
* State-listed Species
* Bureau Sensitive Species
* Bureau Assessment Species

Target Volume - As used in this document, target volume refers to the volume to be offered for sale as directed by the annual budgeting documents for the district.

Visual Resource Management (VRM) - The inventory and planning actions to identify visual values and establish objectives for managing those values and the management actions to achieve visual management objectives.

Wild and Scenic River System - A National system of rivers or river segments that have been designated by Congress and the President as part of the National Wild and Scenic Rivers System (Public Law 90-542, 1968). Each designated river is classified as one of the following:

Wild River: A river or section of a river free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted. Designated wild as part of the Wild and Scenic Rivers System.

Scenic River: A river or section of a river free of impoundments, with shorelines or watersheds still largely primitive and undeveloped but accessible in places by roads. Designated scenic as part of the National Wild and Scenic Rivers System.

Recreational River: A river or section of a river readily accessible by road or railroad, that may have some development along its shorelines, and that may have undergone some impoundment or diversion in the past. Designated recreational as part of the National Wild and Scenic Rivers System.

Acronyms/Abbreviations

ACEC ..... Area of Critical Environmental Concern
ACS ..... Aquatic Conservation Strategy
APS ..... Annual Program Summary
BA(s) ..... Biological Assessments
BLM ..... Bureau of Land Management
BMP(s) ..... Best Management Practices
BRD ..... Biological Resources Division of USGS
CBWR ..... Coos Bay Wagon Road
CON ..... Connectivity/Diversity Blocks
CERTs ..... Community Economic Revitalization Teams
CFER ..... Cooperative Forest Ecosystem Research
COPE ..... Coastal Oregon Productivity Enhancement Project
CT ..... Commercial Thinning
CX ..... Categorical Exclusions
CWA ..... Clean Water Act
CWD ..... Coarse Woody Debris
DEQ(ODEQ) ..... Oregon Department of Environmental Quality
DM ..... Density Management
DPS ..... Distinct Population Segment
EA ..... Environmental Analysis
EIS ..... Environmental Impact Statement
EPA ..... U.S. Environmental Protection Agency
ERFO ..... Emergency Relief Federally Owned
ERMA ..... Extensive Recreation Management Area
ESA ..... Endangered Species Act
ESU ..... Evolutionarily Significant Unit
FEIS ..... Final Environmental Impact Statement
FLPMA ..... Federal Land Policy and Management Act
FONSI ..... Finding of No Significant Impacts
FRESC ..... Forest & Rangeland Ecosystem Science Center
FS ..... Forest Service (USFS)
FY ..... Fiscal Year
GFMA ..... General Forest Management Area
GIS ..... Geographic Information System
GTR ..... Green Tree Retention
IDT ..... Interdisciplinary Teams
LSR ..... Late-Successional Reserve
LUA ..... Land Use Allocation
LWD ..... Large Woody Debris
MMBF ..... Million Board Feet
MOA ..... Memorandum of Agreement
MOU ..... Memorandum of Understanding
NEPA ..... National Environmental Policy Act
NFP (NWFP) ..... Northwest Forest Plan

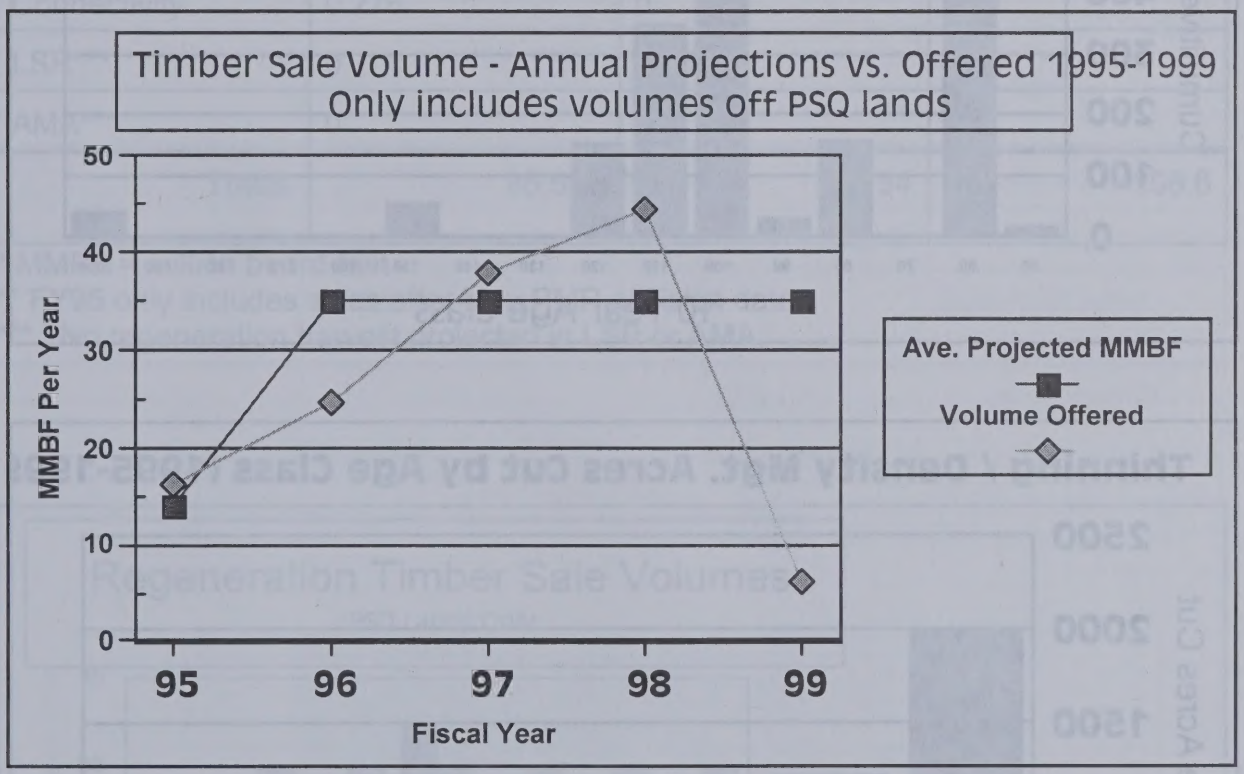
NMFS	National Marine Fisheries Service
O&C	Oregon and California Revested Lands
ODF	Oregon Department of Forestry
ODFW	Oregon Department of Fish and Wildlife
OSU	Oregon State University
PACs	Province Advisory Councils
PD	Public Domain
PGE	Portland General Electric
PILT	Payment in Lieu of Taxes
PL	Public Law
PSQ	Probable Sale Quantity
RA	Resource Area
REO	Regional Ecosystem Office
RIEC	Regional Interagency Executive Committee
RMP	Resource Management Plan
RMP/ROD	The *Salem District RMP* and *Record of Decision*
RO	Forest Service Regional Office
ROD	Record of Decision
RPA	Reserve Pair Area
RR	Riparian Reserve
R/W	Right-of-Way
SEIS	Supplemental Environmental Impact Statement
S&G	Standard and Guideline
S&M	Survey and Manage
SRMA	Special Recreation Management Area
TMO	Timber Management Objective(s)
TMP	Transportation Management Plan
TPCC	Timber Productivity Capability Classification
UO	University of Oregon
USDA	U.S. Department of Agriculture
USDI	U.S. Department of Interior
USFS	U.S. Forest Service
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
WC	Watershed Council
WFSA	Wildfire Situation Analysis
WQMP	Water Quality Management Plan

Appendix 1 - TIMBER SALE VOLUMES - ANNUAL PROJECTIONS VS. OFFERED FY 95-99*

	Volume (MMBF)*					
Land Use Allocation	Projected Annual** @ Full ASQ	Offered FY 95	Offered FY 96	Offered FY 97	Offered FY 98	Offered FY 99
AMA	1.95	2.209	1.779	5.549	0.425	0
Matrix (GFMA)	29.75	13.843	22.293	29.659	42.574	6.279
Connectivity	3.11	0	0	.632	0	0
Misc.Volume From Above LUAs	0	.139	.723	2.120	1.369	.602
Total Volume Off ASQ Lands	34.81	16.191	24.795	37.960	44.368	6.881
LSR Volume (Density Mgmt.)	N/A	0	2.606	0	0	3.559
RR Volume (Density Mgmt.)	N/A	.072	1.618	4.396	1.328	0
Misc. Volume (LSR, RR)	N/A	.223	.122	1.062	.187	0
Total Volume Off Non-ASQ Lands	N/A	.295	4.346	5.458	1.515	3.559
Total Volume Offered	*N/A*	*16.486*	*29.141*	*43.418*	*45.883*	*10.44*
District Budget Target Volume	*N/A*	*23*	*29*	*35*	*35*	*35*

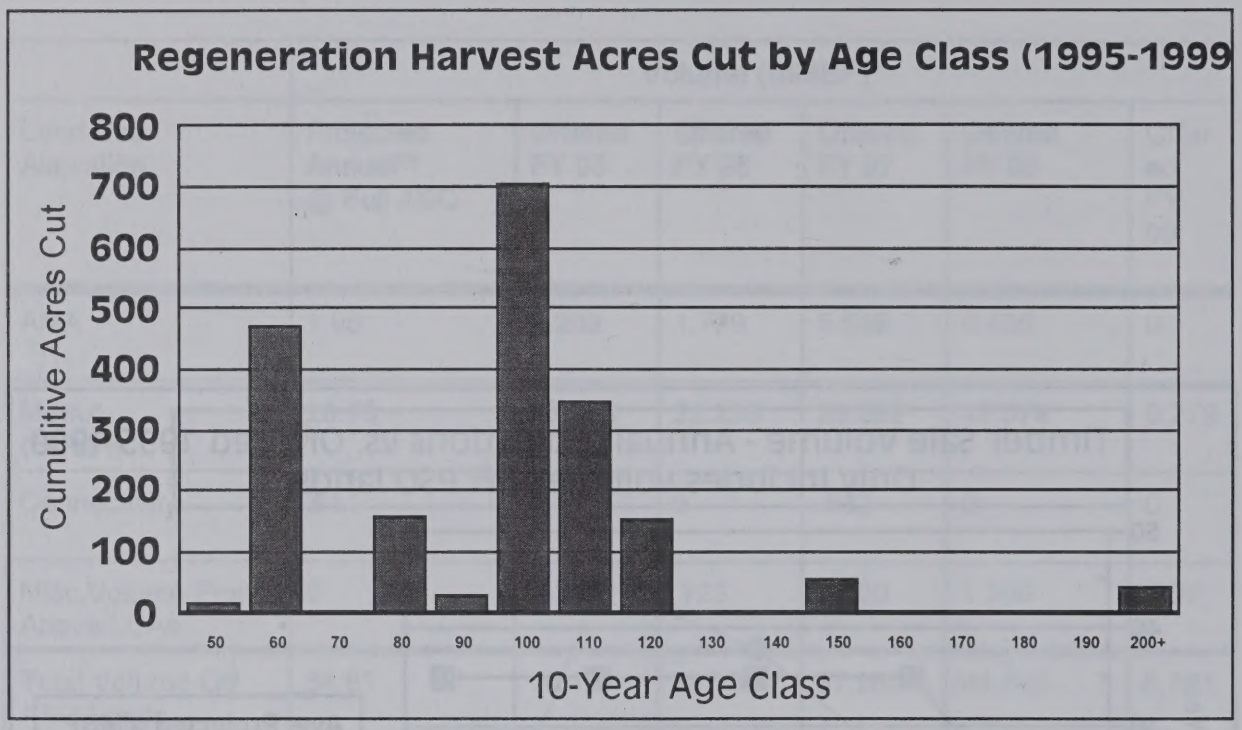
* MMBF = million board feet
** Projected figures are 1/10th of the decadal projection
*** FY95 volumes from date of RMP signing in May, 1995.
Volumes in Appendix 1 are cumulation of volumes in Appendices 3 & 4 plus miscellaneous volume.

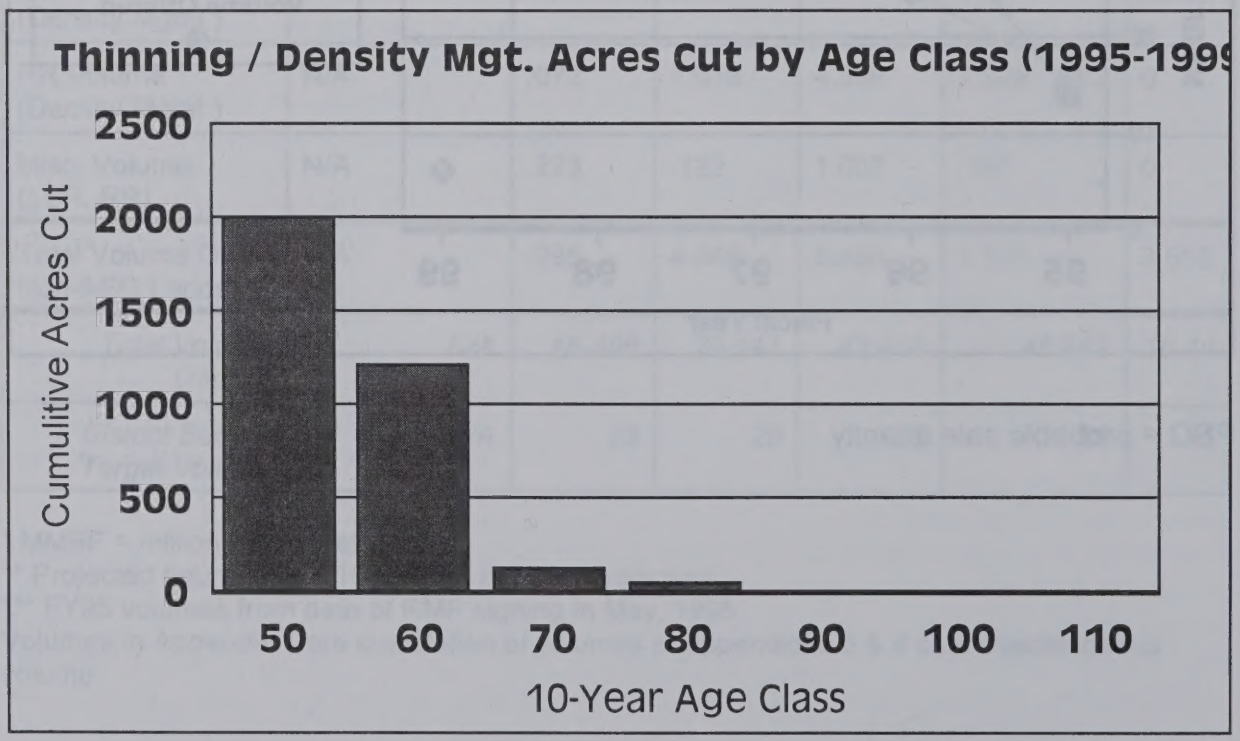
Appendix 1 (continued)



PSQ = probable sale quanity

Appendix 2 - ACRES CUT BY AGE CLASS (1995-1999)



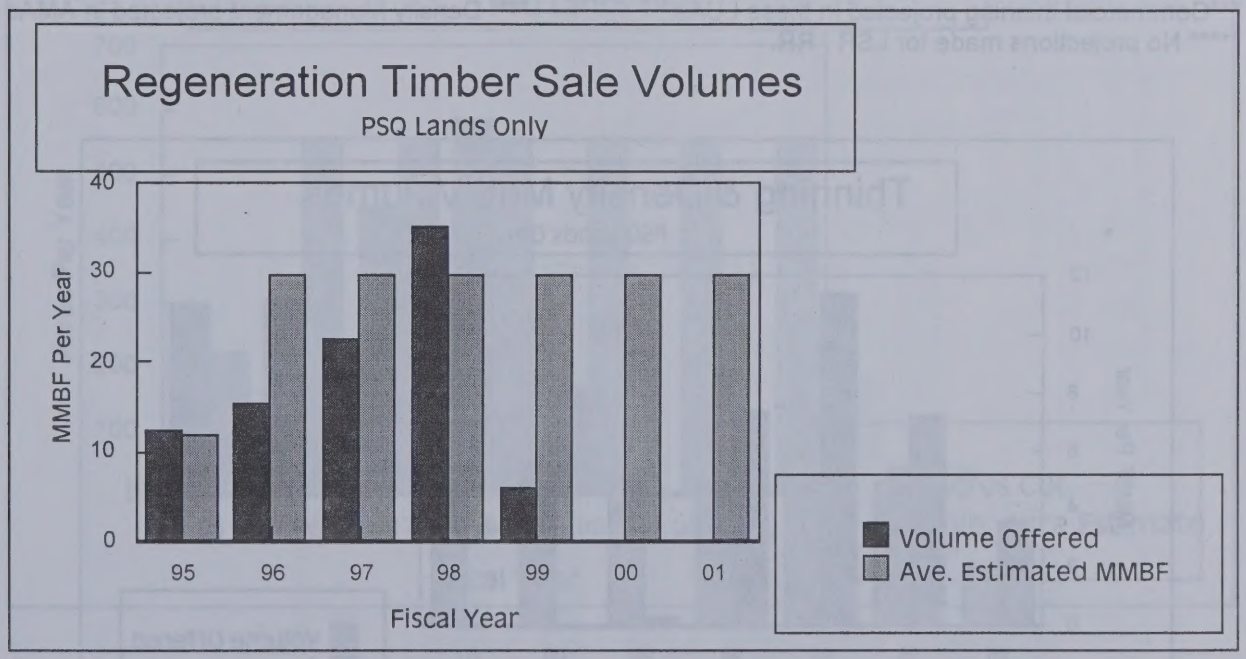


Data includes sales from May 95 RMP signature date to present

Appendix 3 - REGENERATION TIMBER SALE VOLUME
Comparison of projected vs. offered volume by Land Use Allocation (LUA)
FY 95-99

Land Use Allocation	Total District Cumulative MMBF* Offered FY 95-98**	District MMBF Offered FY99	Total District Projected MMBF For Decade 1995-2005
Matrix(GFMA)	85.256	5.979	274.5
Connectivity	0.276	0	24.1
LSR***	0	.175	N/A
AMA***	0	0	N/A
Totals	85.532	6.154	298.6

* MMBF = million board feet
** FY95 only includes sales after May RMP decision date.
*** No regeneration harvest projected in LSR or AMA.



PSQ= Probable Sale Quanity

BLM Library
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P.O. Box 25047
Denver, CO 80225

Appendix 4 - THINNING AND DENSITY MANAGEMENT VOLUME

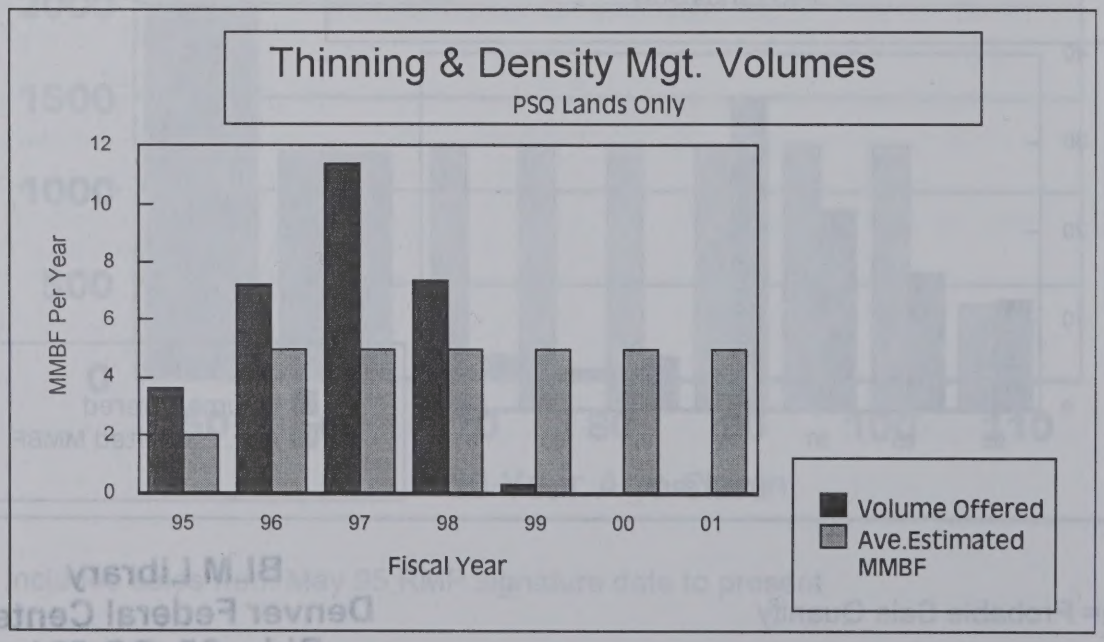
Comparison of projected vs. offered volume by land use allocation (LUA) FY 95-99

Land Use Allocation	Total District Cumulative MMBF* Offered FY 95-98**	District MMBF Offered FY99	Total District Projected MMBF For Decade 1995-2005
Matrix*** (GFMA)	23.113	0.300	23.044
Connectivity***	0.356	0	6.952
AMA****	6.124	0	19.477
Total ASQ	29.593	0.300	49.473
Riparian Reserve	7.414	0	N/A*****
LSR / AMR	2.606	3.384	N/A*****
Total Non-ASQ	10.020	3.384	N/A*****
Grand Total	40.038	3.684	49.473

* MMBF = million board feet ** FY95 only includes sales after May RMP decision date

Commercial thinning projected in these LUAs. * Density Management projected in AMAs

***** No projections made for LSR / RR.

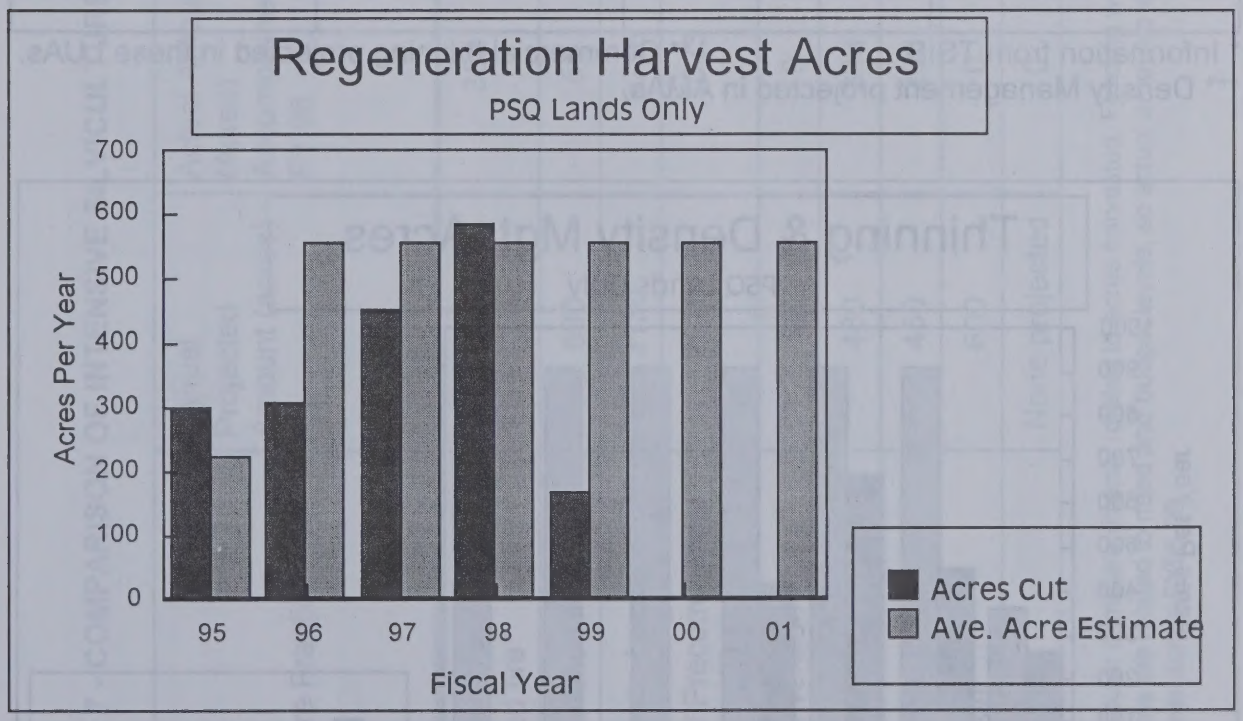


Appendix 5 - REGENERATION HARVEST ACRES

Comparison of projected vs. offered harvest acres by land use allocation (LUA) FY 95-99

Land Use Allocation	Total District Cumulative Acres Offered FY 95-98	District MMBF Offered FY99	Total District Projected Acres For Decade 1995-2005
Matrix (GFMA)	1629	158	4971
Connectivity	12	0	587
LSR*	0	7	N/A
AMA*	0	0	N/A
Totals	1641	165	5558

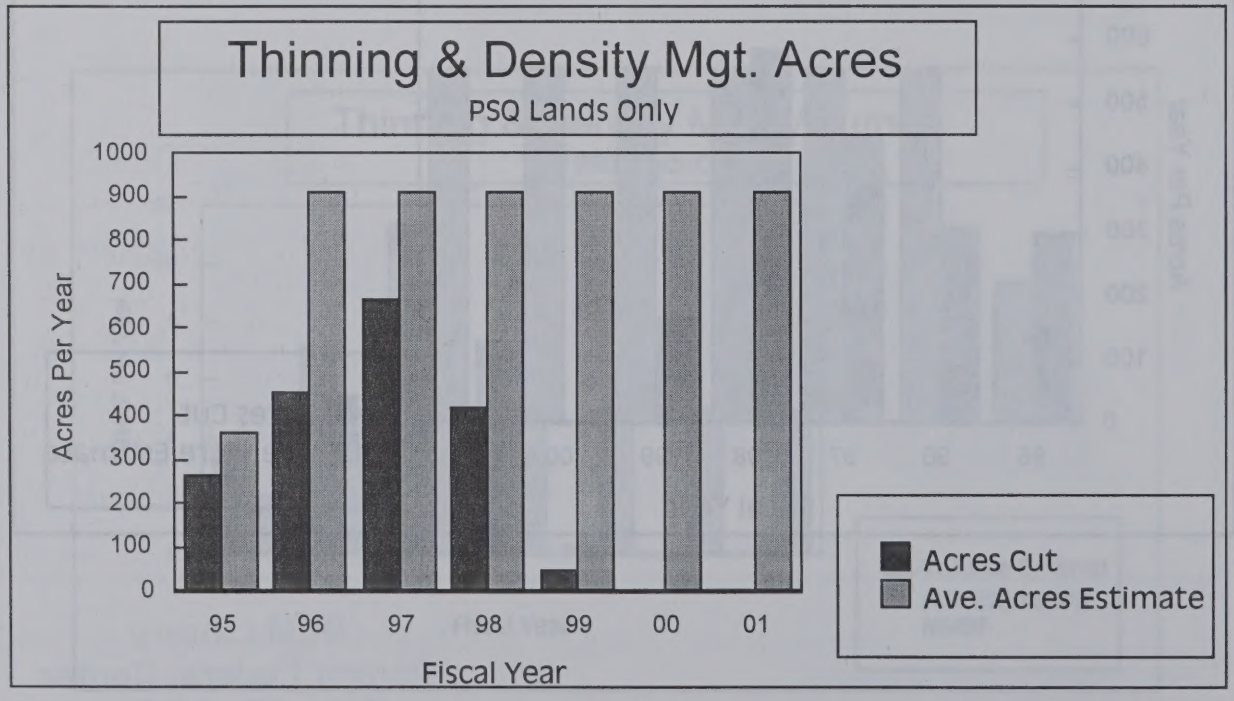
* No regeneration harvest projected in LSR or AMA



Appendix 6 - THINNING AND DENSITY MANAGEMENT ACRES*
Comparison of projected vs. offered acres by Land Use Allocation (LUA) FY 95-99

Land Use Allocation	Total District Cumulative Acres Offered FY 95-98	District Acres Offered FY 99	Total District Projected Acres For Decade 1995-2005
Matrix** (GFMA)	1380	50	2920
Connectivity**	25	0	736
AMA***	409	0	2141
Total ASQ Lands	1814	50	5797
LSR***	173	160	3316
RR	422	0	None
Total Non-ASQ Lands	595	160	3316
Grand Total	2409	210	9113

* Information from TSIS ** Commercial thinning projected in these LUAs.
*** Density Management projected in AMAs.



Appendix 7 - COMPARISON OF INTENSIVE SILVICULTURE PRACTICES - MODEL PROJECTIONS VS. ACTUAL

Silviculture Practice	Annual Projected Amount (acres)	Actual Amount (Acres) Accomplished FY 96	Actual Amount (Acres) Accomplished FY 97	Actual Amount (Acres) Accomplished FY 98	Actual Amount (Acres) Accomplished FY 99
Site preparation / Prescribed fire*	480	352	232	330	88
Site preparation / other*	590	51	159	454	642
Maintenance / protection**	3130	2716	2632	1902	2102
Release / Precommercial thinning (PCT)**	2970	3033	1509	1177	1330
Stand conversion**	90	0	0	0	0
Plant regular stock*	480	338	542	333	382
Plant genetic stock*	450	290	143	186	345
Fertilization**	600	0	0	1671	2974
Pruning	None projected	0	59	169	65

* These particular items are directly related to acres harvested. Funding was sufficient to complete all available acres.

** These items are related to need and budget levels, so actual amounts will vary from year to year. Funding has been sufficient to complete all available acres during FY96-99.

Appendix 9 - SUMMARY OF SPECIAL FOREST / NATURAL PRODUCT ACTIONS

RMP Authorized Product Sales	Unit of Measure	FY 1996 - 1998* Units/Contracts/Value	Fiscal Year 1999 Units/Contracts/Value	Four year TOTAL Units/Contracts/Value
Boughs (coniferous)	Pounds	329,760 pounds/ 56 contracts/ $19,928.00	33,650 pounds/ 14 contracts/ $2,986.50	363,410 pounds/ 70 contracts/ $22,914.50
Burls and Miscellaneous	Pounds	1,250 pounds/ 1 contract/ $200.00	285.7 pounds/ 1 contract/ $20.00	1,535.7 pounds/ 2 contracts/ $220.00
Christmas Trees	Number	7 trees/ 4 contracts/ $35.25	1 tree/ 1 contract/ $5.25	8 trees/ 5 contracts/ $40.50
Edibles and Medicinals	Pounds	17,455.3 pounds/ 30 contracts/ $848.65	7,124 pounds/ 8 contracts/ $290.30	24,579.3 pounds/ 38 contracts/ $1,138.95
Feed and Forage	Tons	133.1 tons/ 25 contracts/ $1,996.77	0 tons/ 0 contracts/ $0.00	133.1 tons/ 25 contracts/ $1,996.77
Floral and Greenery	Pounds	165,475.4 pounds/ 179 contracts/ $17378.50	135,981.0 pounds/ 123 contracts/ $9,701.85	301,456.4 pounds/ 302 contracts/ $27,080.35
Moss and Bryophytes	Pounds	494,225.5 pounds/ 383 contracts/ $28,845.40	79,400 pounds/ 61 contracts/ $2,352.00	573,625.5 pounds/ 444 contracts/ $31,197.40

RMP Authorized Product Sales	Unit of Measure	FY 1996 - 1998* Units/Contracts/Value	Fiscal Year 1999 Units/Contracts/Value	Four year TOTAL Units/Contracts/Value
Mushrooms and Fungi	Pounds	60,932.6 pounds/ 386 contracts/ $6,975.30	12,904 pounds/ 151 contracts/ $2,445.40	73,836.6 pounds/ 537 contracts/ $9,420.70
Ornamentals	Number	500 plants/ 1 contract/ $10.00	0 plants/ 0 contracts/ $0.00	500 plants/ 1 contract/ $10.00
Seed and Seed Cones	Bushels	642 bushels/ 10 contracts/ $659.95	2.5 bushels/ 2 contracts/ $207.50	644.5 bushels/ 12 contracts/ $867.45
Transplants	Number	15,655 plants/ 43 contracts/ $3,679.83	15,364 plants/ 29 contracts/ $2,860.08	31,019 plants/ 72 contracts/ $6,539.91
Wood Products and Firewood **	Cubic feet	183,122.8 cu ft/ 472 contracts/ $23,929.83	32,519.6 cu. ft/ 163 contracts/ $4,519.55	215,642.4 cu. ft/ 635 contracts/ $28,449.38
TOTALS		----------/ 1,590 contracts/ $104,487.48	----------/ 553 contracts/ $25,388.43	----------/ 2,143 contracts/ $129,875.91

* - Contract numbers represent individual sale (or free use) actions. **Value** is in dollars per year received.
** To avoid double counting, this line does not include sawtimber which is reported elsewhere.

Appendix 9 - continued

Appendix 10 - LAND EXCHANGES FY 95-99

No Additions to this Table for FY99

Name	Exchange Number	Date	Acres Acquired	Acres Conveyed	Remarks
Aims Exchange	OR50799	2/24/95	0	27.09	BLM acquired 48.80 acres is Perpetual Scenic Easement to facilitate implementation of the Sandy Wild& Scenic River Mgt. Plan.
Sandy Exchange	OR50419	3/7/95	80.85	0	5 acres of timber only conveyed in return for the acquired acreage. Acreage acquired to facilitate implementation of the Sandy Wild& Scenic River Mgt. Plan.
Rocky Top Exchange	OR50847	8/3/95	142.82	110.00	Exchange to consolidate ownership and acquire a Bald Eagle Nest Site.
River Trail Exchange	OR51155	5/7/96	154.41	80	Exchange to obtain access for proposed Molalla River Trail.
Little N.Fk.Wilson River Exchange	OR51231	6/26/96	525.01	489.93	Exchange to obtain high quality Marbled Murrelet, Spotted Owl and Salmon Habitat.
Wildwood Exchange	OR52446	3/11/98	89.07	80	Also acquired 8.12 acre Perpetual Trail Easement
Mt.Hood Corridor Exchange	OR53235	1/12/98	3531.65	1453.52	Exchange completed per Title IV of the Omnibus Consolidated Appropriations Act for FY 1997. Lands are in view shed of Mt.Hood Corridor.
Totals			4523.81	2240.54	Net Acreage increase to BLM of 2,283.27 Acres

Source: Serial Register of Realty Cases - Salem District

Appendix 11 - LAND SALES FY 95-99

These land sales were isolated parcels of BLM ownership that were targeted for disposal (land tenure zone 3), or minor sales completed to resolve occupancy trespasses.

Purchaser	Serial Number	Date	Acres Sold
Peter Boden	OR51166	9/25/95	0.43
Robert Dersham	OR51291	2/23/95	0.80
Caffall Brothers	OR51890	1/9/96	2.44
Ray Johnson	OR51998	10/17/95	0.15
Clem Lulay	OR52096	5/26/96	0.19
Clara Taylor	OR52165	10/17/95	0.46
Ervin Simmons	OR52166	10/17/95	0.38
Robert Mommson	OR52644	1/24/97	0.20
Stimson Lmbr. Co.	OR53113	8/28/97	0.15
Stimson Lmbr. Co.	OR53114	8/28/97	0.60
Morrow For.Pds.	OR53115	11/19/97	1.00
Morrow For.Pds.	OR53116	11/19/97	2.10
Morrow For.Pds.	OR53117	11/19/97	2.60
City of McMinnville	OR54442	6/16/98	3.79
Susi K. Trattner	OR53611	11/6/98	0.19
Konstantin Verbin	OR53985	4/29/99	0.34
		Total Acres Sold	15.82

Appendix 12 - WATERSHED RESTORATION PROJECTS FY 95-99

Type Project	Number of Projects	Number in Key Watersheds	Number in Non-key Watersheds	Miles / Acres /Streams, etc.
Roads Closed (gates/berms)	36	11	25	128+ miles
Roads Obliterated	10	5	5	26+ miles
Culverts Replaced	210*	32	178	634+ culverts, 32+ miles
Roads Resurfaced	18	7	11	63+ miles
Riparian Planting	10	8	2	57 acres
Riparian Density Management	2	1	1	11 acres
Riparian Inventory	13	3	10	17+ miles
Stream / Fish Habitat Inventory	73	9	64	147+ miles
New Fish Structures	18	10	8	15+
Fish Structures Maintained	7	6	1	8+miles

Note: These numbers are rough estimates, collected from numerous individuals and from a variety of sources. They are intended to give a general idea of where restoration efforts have been focused and the approximate level of activities in restoration work since implementation of the RMP.

* This number is of limited value. Some contracts replaced numerous culverts. Other projects were single culverts.

Appendix 13 - SUMMARY OF PROJECT UNITS MONITORED FY99

Project Type	Number Tillamook R.A.	Number Marys Peak R.A.	Number Cascades R.A.	Total Number For The District
Timber Sales	0	2	2	4
Silviculture Projects	0	0	1	1
Riparian Projects	N/C	N/C	N/C	N/C
Fish Habitat Projects	N/C	N/C	N/C	1
Wildlife Habitat Projects	N/C	N/C	N/C	N/C
Prescribed Burns	N/C	N/C	N/C	N/C
Road Restoration / Bridge Replacement	1	2	0	3
Other Projects	0	0	0	0

N/C = None Completed to Monitor

Appendix 14 - FY 99 IMPLEMENTATION MONITORING SELECTION CATEGORIES

Selection Categories From Database	Units Completed FY99*	Units Monitored FY99	Percent Monitored
Ground Disturbing Activities	26	7	27
Projects Occurring in Riparian Reserves	19	5	26
Structures within Riparian Reserves	10	2	20
Projects in Late Successional Reserves	16	4	25
Projects in Adaptive Management Areas	9	2	22
Timber Sales in Watersheds w/ <15% Late Successional Forest**	2	2	100
Matrix Regeneration Harvests	8	2	25
Density Management / Commercial Thinning	6	2	33
Projects in Community Watersheds	8	3	38
Projects Within or Adjacent to Special Areas	2	1	50
Projects Which Include or Are Adjacent to Special Habitats	1	1	100
Projects in VRM II or III Areas	3	1	33
Projects in Wild and Scenic River Corridors	4	1	25
Projects in Rural Interface	4	1	25
Noxious Weed Project	0	0	0
Prescribed Burn Projects	0	0	0
Projects Which Required Dust Abatement	0	0	0

Note: Minimum monitoring requirements in each listed category is 20%. The district exceeded the minimums in numerous categories, primarily due to overlapping applicability (many projects meet several criteria in above table).

* Projects completed between 1 Oct 98 and 30 June 99.

** All in compliance with 15% rule (avoided older stands, salvage, thinning)

Appendix 16 - RESPONSE FREQUENCIES AND DISTRIBUTION BY SELECTED UNITS - "NO" OR "DOES NOT MEET" RESPONSES (SEE MONITORING NARRATIVE FOR EXPLANATIONS)

General Areas of Noted Questions >	Beneficial Use and BMPs		Fish	Riparian				NEPA			Water-shed Analysis	Totals
Question Number >	*36*	*38*	*46*	*3*	*4*	*5*	*6*	*7*	*14*	*23*	*2*	
Project Name												
Hull Park Road				X	X	X		X	X		X	6
Salmon River Fish Restoration				X	X	X	X			X		5
Good Gawley Timber Sale #2		X		X	X			X				4
Cascades Fertilization		X			X					X		3
Nestucca Road Decommission		X	X					X				3
Reese Creek Timber Sale #1	X											1
Williams Creek Road Restoration	X											1
Total	2	3	1	3	4	2	1	3	1	2	1	23

Appendix 17 - Resident Labor Force, Employment by Industry, Oregon

	1994	1995	1996	1997	1998
Civilian Labor Force	1640000	1,652,700	1,719,700	1,727,600	1,762,200
Unemployment	89000	80,100	101,600	100,600	98,500
Total Wage and Salary Emp.	1362900	1,418,400	1,474,600	1,526,400	1,556,600
Total Manufacturing	221300	229,300	235,800	243,600	244,700
>Lumber & Wood Products (& Paper)	63300	61,300	59,800	60,200	58,500
>Other Manufacturing	158000	168,000	176,000	183,400	186,200
Total Non-Manufacturing	1141600	1,189,100	1,238,900	1,282,800	1,311,900
>Const. & Mining	62900	70,400	79,400	83,300	84,300
>Trans., Comm. & Utilities	68900	71,300	73,500	74,900	76,400
>Trade	344100	357,000	365,900	377,500	383,900
>Finance, Ins. & Real Est.	87800	87,200	91,000	94,800	95,200
>Services & Misc.	343200	362,900	382,600	402,800	416,800
>Government	234700	240,200	246,600	249,500	255,400

Appendix 18 - Resident Labor Force, Employment by Industry, Benton County

	1994	1995	1996	1997	1998
Civilian Labor Force	39,410	41,170	42,680	42,270	41,990
Unemployment	1,010	910	1,150	1,050	1,290
Total Wage and Salary Emp.	34,670	37,100	38,540	39,340	38,740
Total Manufacturing	7,090	8,130	8,840	9,300	8,660
>Lumber & Wood Products	1,130	1,010	1,030	1,070	930
>Other Manufacturing	5,960	7,120	7,810	8,230	7,730
Total Non-Manufacturing	27,590	28,970	29,700	30,040	30,080
>Const. & Mining	800	860	960	980	1,050
>Trans., Comm. & Utilities	930	950	940	930	960
>Trade	5,390	5,680	6,010	6,030	6,170
>Finance, Ins. & Real Est.	1,370	1,440	1,400	1,290	1,290
>Services & Misc.	7,570	8,290	8,600	8,970	8,940
>Government	11,520	11,760	11,810	11,860	11,670

Appendix 19 - Resident Labor Force, Employment by Industry, Clatsop County

	1994	1995	1996	1997	1998
Civilian Labor Force	17,380	17,250	17,520	17,630	17,520
Unemployment	1,100	870	1,110	1,180	1,050
Total Wage and Salary Emp.	14,140	14,530	14,680	15,190	15,280
Total Manufacturing	2,710	2,620	2,670	2,630	2,530
>Lumber & Wood Products	1,650	1,600	1,630	1,670	1,620
>Other Manufacturing	1,060	1,020	1,040	960	910
Total Non-Manufacturing	11,430	11,910	12,010	12,560	12,750
>Const. & Mining	570	600	620	630	670
>Trans., Comm. & Utilities	520	530	500	480	510
>Trade	4,170	4,320	4,290	4,290	4,280
>Finance, Ins. & Real Est.	600	590	550	560	560
>Services & Misc.	3,130	3,410	3,520	3,940	4,010
>Government	2,440	2,460	2,520	2,650	2,720

Appendix 20 - Resident Labor Force, Employment by Industry, Columbia County

	1994	1995	1996	1997	1998
Civilian Labor Force	20,640	20,650	21,840	22,290	22,790
Unemployment	1,340	990	1,340	1,360	1,330
Total Wage and Salary Emp.	8,830	9,090	9,450	9,770	9,880
Total Manufacturing	2,170	2,240	2,290	2,320	2,220
>Lumber & Wood Products	1,420	1,510	1,470	1,460	1,410
>Other Manufacturing	750	730	820	860	810
Total Non-Manufacturing	6,660	6,840	7,170	7,450	7,660
>Const. & Mining	440	490	520	560	550
>Trans., Comm. & Utilities	680	670	710	700	780
>Trade	1,920	1,940	2,050	2,230	2,310
>Finance, Ins. & Real Est.	380	390	400	410	420
>Services & Misc.	1,360	1,450	1,530	1,600	1,590
>Government	1,880	1,900	1,960	1,960	2,010

Appendix 21 - Resident Labor Force, Employment by Industry, Lincoln County

	1994	1995	1996	1997	1998
Civilian Labor Force	20,990	21,040	21,720	21,520	21,390
Unemployment	1,270	1,480	1,620	1,850	1,670
Total Wage and Salary Emp.	15,780	16,020	16,670	16,780	16,870
Total Manufacturing	1,630	1,540	1,470	1,360	1,310
>Lumber & Wood Products	890	820	780	710	690
>Other Manufacturing	740	720	690	650	620
Total Non-Manufacturing	14,150	14,480	15,210	15,420	15,560
>Const. & Mining	700	770	780	760	700
>Trans., Comm. & Utilities	450	470	520	530	550
>Trade	5,050	5,040	5,170	5,280	5,190
>Finance, Ins. & Real Est.	930	870	850	820	800
>Services & Misc.	3,790	3,800	3,950	3,960	4,130
>Government	3,230	3,540	3,950	4,070	4,210

Appendix 22 - Resident Labor Force, Employment by Industry, Linn County

	1994	1995	1996	1997	1998
Civilian Labor Force	47,890	49,220	52,210	52,050	53,220
Unemployment	3,370	2,990	3,650	3,820	4,680
Total Wage and Salary Emp.	35,740	37,850	39,900	41,070	41,210
Total Manufacturing	10,620	11,200	11,740	12,190	11,770
>Lumber & Wood Products	5,010	4,910	5,020	5,110	4,980
>Other Manufacturing	5,610	6,290	6,720	7,080	6,790
Total Non-Manufacturing	25,120	26,650	28,170	28,890	29,440
>Const. & Mining	1,770	1,990	2,330	2,450	2,530
>Trans., Comm. & Utilities	1,620	1,660	1,730	1,790	1,950
>Trade	7,870	8,110	8,580	8,910	9,080
>Finance, Ins. & Real Est.	1,270	1,310	1,410	1,470	1,410
>Services & Misc.	6,710	7,450	7,780	7,880	8,000
>Government	5,870	6,140	6,340	6,390	6,480

Appendix 23 - Resident Labor Force, Employment by Industry, Tillamook County

	1994	1995	1996	1997	1998
Civilian Labor Force	10,830	10,900	11,420	11,120	11,120
Unemployment	520	540	680	730	670
Total Wage and Salary Emp.	7,070	7,250	7,620	7,570	7,660
Total Manufacturing	1,320	1,310	1,350	1,340	1,370
>Lumber & Wood Products	560	540	540	520	540
>Other Manufacturing	760	770	810	820	830
Total Non-Manufacturing	5,750	5,940	6,270	6,230	6,290
>Const. & Mining	220	250	260	270	300
>Trans., Comm. & Utilities	270	280	280	270	250
>Trade	1,800	1,810	1,980	1,950	1,950
>Finance, Ins. & Real Est.	310	320	330	370	350
>Services & Misc.	1,530	1,680	1,780	1,700	1,730
>Government	1,620	1,600	1,640	1,690	1,710

Appendix 24 - Resident Labor Force, Employment by Industry, Salem Metropolitan Area (Polk and Marion Counties)

	1994	1995	1996	1997	1998
Civilian Labor Force	158,600	158,700	164,500	164,200	168,800
Unemployment	8,400	7,300	9,400	9,600	9,300
Total Wage and Salary Emp.	120,800	124,500	128,400	131,400	134,500
Total Manufacturing	17,300	17,800	17,900	17,900	17,800
>Lumber & Wood Products	4,100	4,200	4,000	4,000	3,900
>Other Manufacturing	13,200	13,600	13,900	13,900	13,900
Total Non-Manufacturing	103,500	106,800	110,600	113,500	116,700
>Const. & Mining	6,000	6,500	7,100	7,800	8,200
>Trans., Comm. & Utilities	3,500	3,500	3,600	3,600	3,800
>Trade	26,400	27,400	27,600	27,800	28,500
>Finance, Ins. & Real Est.	6,700	6,500	6,500	6,600	6,700
>Services & Misc.	27,700	29,000	30,100	31,000	32,000
>Government	33,200	33,900	35,700	36,700	37,600

Appendix 25 - Resident Labor Force, Employment by Industry, Portland Metropolitan Statistical Area (Clackamas, Multnomah, Washington, Yamhill Counties)

	1994	1995	1996	1997	1998
Civilian Labor Force	936,500	956,500	1,001,900	1,025,200	1,048,800
Unemployment	40,300	35,500	45,400	44,100	44,800
Total Wage and Salary Emp.	802,100	839,600	879,000	916,700	938,600
Total Manufacturing	129,900	137,200	142,000	147,300	148,900
>Lumber & Wood Products	16,400	16,400	15,900	15,800	15,700
>Other Manufacturing	113,500	120,800	126,100	131,500	133,200
Total Non-Manufacturing	672,200	702,400	737,000	769,400	789,700
>Const. & Mining	40,500	45,400	52,100	55,100	55,300
>Trans., Comm. & Utilities	45,600	48,400	50,800	52,400	53,900
>Trade	203,600	210,800	218,300	227,700	233,200
>Finance, Ins. & Real Est.	61,500	60,200	63,600	66,700	67,400
>Services & Misc.	213,000	227,500	238,600	252,500	261,300
>Government	108,100	110,100	113,600	114,800	118,400

*Clackamas, Multnomah, Washington, Yamhill, and Clark County,WA

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Appendix 25 - Resident Labor Force, Employment by Industry, Portland Metropolitan Statistical Area (Clackamas, Multnomah, Washington, Yamhill Counties)

	1994	1995	1996	1997	1998
Civilian Labor Force	630,000	638,600	651,800	673,700	686,900
Unemployment	40,300	35,600	45,400	44,100	40,500
Total Wage and Salary Emp.	602,700	639,900	676,600	716,700	756,600
Total Manufacturing	129,900	137,200	144,200	147,100	148,900
>Lumber & Wood Products	15,400	16,400	16,400	16,800	17,100
>Other Manufacturing	114,500	120,800	127,800	130,300	131,800
Total Non-Manufacturing	472,800	502,700	532,400	569,600	607,700
>Const. & Mining	40,000	43,400	46,100	48,100	50,400
>Trans., Comm. & Utilities	44,800	46,400	50,600	52,400	54,600
>Trade	201,600	210,600	219,200	229,100	239,200
>Finance, Ins. & Real Est.	31,500	32,200	33,600	35,700	37,400
>Services & Misc.	119,000	127,200	137,700	152,400	167,300
>Government	106,100	112,900	115,400	118,400	118,400

*Clackamas, Multnomah, Washington, Yamhill and Clark County, WA

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